

## CLIMATOLOGICAL DATA FOR FEBRUARY, 1912.

## DISTRICT No. 3, OHIO VALLEY.

Prof. FERDINAND J. WALZ, District Editor.

## GENERAL SUMMARY.

The month was cold, largely cloudy, and generally disagreeable in practically all parts of the district, and as a whole it was the coldest February since 1905. The first half of the month was remarkably cold, and while no record-breaking extremes of temperature were reached, it formed, with the severe weather which prevailed during the month of January, a period of cold which for combined duration and severity has had no equal during the past 25 years in the Ohio Valley. In consequence of this long period of low temperatures the ground was frozen to an unusual depth, and a great deal of damage was suffered in the cities of the central and northern portions by the bursting of gas and water pipes. At Indianapolis, Ind., the water company in excavating in the streets found the ground frozen to depths of 4 to 4.5 feet, the deepest experienced by them during the past quarter of a century. Numerous reports have come in to the effect that frost was found at a depth of 4.5 feet.

There were numerous snowstorms during the first three or four days, otherwise the entire cold period was unusually free from midwinter storms. The last two weeks of the month, while more moderate in temperature, were much more stormy. Destructive winds occurred on several days and also there were several days with heavy rains. The most important storms of the month passed over the district in the periods 20th-22d and 25th-27th. Both of these storms moved from the western Gulf and southern Plains regions northeastward into the Ohio Valley, passing out over the lower Lake region and the New England coast. The first of these storms was accompanied by heavy snows over most of the district north of the Ohio River and rains over the section south of that river. During both storms the barometer registered unusually low.

The aggregate of precipitation was below normal in nearly all sections. Snowfall was light to moderate over Kentucky and Tennessee and over the eastern portion of Ohio and western portions of Pennsylvania and West Virginia. Both in western New York and the northern and central portions of Ohio, Indiana, and Illinois it was remarkably heavy, especially in the upper Wabash Basin of the last-named States. There was good sleighing throughout the month in western New York. Many reports were to the effect that winter wheat has suffered considerably from the hard freezes, and also that heavy rains had washed the fields badly in places.

The following table summarizes the chief features of meteorological interest for the several sections of the district:

| Portions of States included in the Ohio River Basin. | Temperature. |            |          | Precipitation. |          |            |                   |                |                       | Average snow-fall.      |      |
|--|--------------|------------|----------|----------------|----------|------------|-------------------|----------------|-----------------------|-------------------------|------|
|  | Average.     | Departure. | Highest. | Lowest.        | Average. | Departure. | Greatest monthly. | Least monthly. | Greatest in 24 hours. | Average number of days. |      |
| New York.....  | 18.8         | -2.5       | 52       | -20            | 1.82     | -0.32      | 1.87              | 1.78           | 0.78                  | 10                      | 11.5 |
| Pennsylvania.....                                    | 22.2         | -4.6       | 63       | -27            | 1.96     | -1.10      | 3.41              | 1.02           | 1.39                  | 10                      | 8.5  |
| Maryland.....  | 21.9         | -3.5       | 57       | -18            | 2.42     | -0.81      | 2.68              | 1.98           | 1.30                  | 10                      | 15.5 |
| West Virginia.....                                   | 27.4         | -4.6       | 70       | -14            | 2.40     | -0.78      | 5.08              | 1.14           | 1.95                  | 9                       | 6.9  |
| Ohio.....  | 23.3         | -4.6       | 68       | -24            | 2.09     | -0.72      | 3.11              | 0.98           | 1.60                  | 9                       | 8.3  |
| Indiana.....   | 23.6         | -5.5       | 60       | -17            | 2.75     | -0.21      | 4.06              | 1.08           | 2.00                  | 7                       | 13.5 |
| Illinois.....  | 25.6         | -4.4       | 68       | -16            | 2.47     | -0.27      | 4.25              | 1.12           | 1.62                  | 7                       | 13.9 |
| Kentucky.....  | 29.7         | -5.4       | 68       | -14            | 3.08     | -0.49      | 4.91              | 1.36           | 2.43                  | 7                       | 3.3  |
| Tennessee.....                                       | 35.5         | -4.0       | 70       | -15            | 4.14     | -0.44      | 7.20              | 2.33           | 4.11                  | 9                       | 3.2  |
| Alabama.....   | 37.9         | -4.2       | 71       | -2             | 4.09     | -1.21      | 5.71              | 3.26           | 1.75                  | 8                       | 3.5  |
| Georgia.....   | 36.8         | -3.4       | 65       | 4              | 7.52     | .....      | .....             | .....          | 1.40                  | 11                      | 7.8  |
| North Carolina.....                                  | 33.5         | -3.4       | 71       | -9             | 4.32     | -0.63      | 5.98              | 2.28           | 1.75                  | 11                      | 9.4  |
| Virginia.....  | 30.1         | -3.1       | 67       | -12            | 2.94     | -0.86      | 3.60              | 2.18           | 1.42                  | 9                       | 5.5  |

## TEMPERATURE.

Abnormally cold weather, which prevailed through nearly the whole of January, continued during the first half of February, the mean daily temperature during those two weeks ranging from  $5^{\circ}$  to  $35^{\circ}$  below the seasonal normal. The accumulated deficiency in temperature for the 45 days, January 1 to February 14, inclusive, at Louisville, Ky., was  $510^{\circ}$  or an average of  $11.3^{\circ}$  per day. At Columbus, Ohio, the average temperature of these 45 consecutive days was only  $17.4^{\circ}$ , being a departure from normal of  $-11.6^{\circ}$ . These deficiencies, together with the fact that the temperature was below freezing during by far the greater portion of the entire time, make it one of the most prolonged and severe cold spells on record at either of these two stations and typifies the conditions which in a large measure prevailed over the greater portion of the Ohio Valley, in fact about all of it north of Tennessee.

During the latter half of the month moderate winter weather prevailed, although there were two sharp cold waves, one about the 22d, the other during the closing days of the month. Temperature was above normal during only two periods, namely, 15th-19th and 24th-26th. The average temperature of the month ranged from  $3^{\circ}$  to  $5^{\circ}$  below normal for the several sections of the district, but at many stations there were minus departures of from  $5^{\circ}$  to  $8^{\circ}$ . The lowest temperatures were registered over the western and southern portions of the district on the 4th and ranged from zero to  $16^{\circ}$  below zero, but over the northeastern portion of the district the lowest temperatures were registered on the 10th or 11th and ranged from  $10^{\circ}$  to  $27^{\circ}$  below zero. The highest temperatures were registered either on the 17th, 18th, 25th, or 26th, and ranged between  $53^{\circ}$  and  $71^{\circ}$ .

## PRECIPITATION.

Precipitation averaged below normal in all parts of the district, except at a few stations located in southwestern North Carolina, in northern Georgia, and in west central Tennessee, where there were amounts between 5 and 8 inches. Between 4 and 5 inches occurred over other portions of Tennessee and less than 4 inches over all the rest of the district. In fact, over the major portion of the district the aggregate amount of rain and melted snow measured less than 3 inches. Snowfall was greatest, the total amounts ranging between 11 and 25 inches, in the Wabash Basin of Illinois and Indiana. Over other sections of Indiana and most of Ohio and the upper watersheds of the Ohio River and tributaries snowfall for the month ranged all the way from 3 to 17.5 inches, the larger amounts as a rule occurring in northern Ohio, over the Muskingum and Mahoning Valleys of that State and over the Allegheny watershed of Pennsylvania and New York. The snowfall, while considerable, was rather lighter than usual over Kentucky and the southern sections of the district, except that in some parts of the mountain regions of North Carolina there were from 8 to 15 inches. Precipitation during the first half of the month was nearly all in the form of snow; that during the latter half was rain in the southern and rain and snow mixed in the northern sections of the district.

During the 20th and 21st a severe snowstorm attended by high winds and lasting from 24 to 30 hours swept over Illinois, Indiana, and Ohio. The amount of snow that fell in this storm was not only large but it drifted badly. In many places snow banks 5 feet and higher were formed, railroad cuts were filled, highways made impassable, electric service wires of all kinds temporarily put out of commission, and trade and traffic generally demoralized. This snowstorm was part of a general disturbance which developed over the Southwest on the 20th and moved northeastward over the Central and Eastern States, increasing in strength during the 21st and 22d, and which proved to be one of the most severe and most extensive general disturbances that has passed over this section of the country for several years past. Besides the heavy snow in the northern part of the storm, heavy rains and gales and destructive thunderstorms attended it over most of the southern and eastern portions of the district. Wind velocities of 50 to 75 miles per hour were reported at many places during the passage of this storm, besides the wind blew steadily at high velocities for several hours. The barometer registered phenomenally low, as exhibited by the following readings, which are reduced to sea level: On the 21st at Louisville, Ky., 29.02 inches; at Columbus, Ohio, 28.88 inches, and on the 22d at Philadelphia, Pa., 28.84 inches. This is the lowest barometer reading on record at Columbus and the next lowest on record at the other stations mentioned. At Lexington, Ky., the barometer reached 27.94 inches at

10.40 a. m. the 21st, this being the pressure for the station elevation of 989 feet above sea level, the lowest on record at that station.

## MISCELLANEOUS.

Thunderstorms occurred in the periods 20th-21st and 25th-26th, and sleet occurred on several dates in various parts of the district. High winds occurred on numerous dates in the latter half of the month. A barn filled with feed and farming implements was struck by lightning and destroyed with all its contents in Giles County, Tenn., on the 20th. The rainstorm of the 25th-26th did considerable damage to crops and property in six or eight counties of east central Tennessee, largely from overflowing of small streams, although some damage was due to high winds.

## RIVERS.

The thawing weather, rains, and melting snow toward the end of the month was the cause of ice gorges and flood stages of water in many of the streams of the district, particularly in the northern and in the headwater tributaries of the Ohio River. The greatest damage reported was that done in the Youghiogheny River Valley about West Newton, Pa., where the water reached 30.6 feet, or 2.4 feet higher than ever before known. Many small towns along the river were flooded and houses inundated or crushed by ice. One life was lost. The property loss is estimated at about half a million dollars. In Ohio the Scioto and Great Miami were above flood stage at one or two places, but no damage resulted. In Indiana there was some damage done by White River at points below Indianapolis and some on the Wabash in and about Logansport, but the damage at neither place was extensive. It was due largely to flooding caused by formation of ice gorges. There was also some damage by the Wabash in the vicinity of Mount Carmel, Ill., where the river reached flood stage due to ice gorges.

There was an extraordinarily rapid rise in the upper Kentucky River and in the upper Cumberland River in Kentucky on the 22d. The Cumberland River approached flood stages at Clarksville and Nashville in the latter part of the month. The Tennessee River was open for navigation during the entire month with a good stage of water. Nearly all streams were bank full at the end of the month.

Navigation on account of floating ice was closed on the Ohio River above the falls at Louisville from about the 4th to the 17th. Flood stages were reached at several points below the falls, notably about Mount Vernon and Evansville, Ind. While the high water in the lower river caused some inconvenience, there was no damage done; in fact, it was believed to be beneficial in carrying out immense quantities of stranded ice which would have interfered with river traffic for several weeks. Flood stage was not reached in the Ohio River at any point above the falls at Louisville, Ky.

TABLE 1.—Climatological data for February, 1912. District No. 3, Ohio Valley.

TABLE 1.—Climatological data for February, 1912. District No. 3—Continued.

| Stations.              | Counties.       | Elevation, feet. | Length of record, years | Temperature, in degrees Fahrenheit. |         |                            |         |       | Precipitation, in inches. |        |                            |                       |                            | Sky.                          | Prevailing wind direction.   | Observers.     |                |                       |                          |
|------------------------|-----------------|------------------|-------------------------|-------------------------------------|---------|----------------------------|---------|-------|---------------------------|--------|----------------------------|-----------------------|----------------------------|-------------------------------|------------------------------|----------------|----------------|-----------------------|--------------------------|
|                        |                 |                  |                         | Mean.                               |         | Departure from the normal. |         |       | Greatest daily range.     |        | Total.                     |                       | Departure from the normal. |                               | Greatest in 24 hours.        |                |                |                       |                          |
|                        |                 |                  |                         | Highest.                            | Lowest. | Date.                      | Lowest. | Date. | Greatest daily range.     | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall unmeted.    | Number of partly cloudy days. | Number of 0.01 inch or more. | Numb. of days. |                |                       |                          |
| <b>Ohio—Continued.</b> |                 |                  |                         |                                     |         |                            |         |       |                           |        |                            |                       |                            |                               |                              |                |                |                       |                          |
| Cardington.....        | Morrow.....     | 1,010            | 17                      | 22.0                                | -2.4    | 52                         | 26      | -15   | 13                        | 44     | 1.97                       | 0.72                  | 5.0                        | 14                            | 0                            | 15             | sw.            |                       |                          |
| Chillicothe.....       | Ross.....       | 630              | 9                       | 22.0                                | -2.5    | 53                         | 26      | -7    | 4                         | 31     | 2.11                       | 0.95                  | 6.0                        | 5                             | 13                           | 13             | Marion Mackey. |                       |                          |
| Cincinnati.....        | Hamilton.....   | 628              | 41                      | 26.7                                | -7.7    | 53                         | 26      | -10   | 10                        | 39     | 2.17                       | -0.50                 | 3.0                        | 8                             | 7                            | 9              | w.             |                       |                          |
| Circleville.....       | Pickaway.....   | 694              | 24                      | 25.6                                | -2.5    | 60                         | 26      | -10   | 10                        | 39     | 2.17                       | 0.15                  | 3.0                        | 7                             | 12                           | 5              | 12             | Dr. H. R. Clarke.     |                          |
| Clarington.....        | Monroe.....     | 600              | 9                       | 25.8                                | -2.6    | 62                         | 26      | -6    | 10                        | 46     | 2.13                       | 0.76                  | 7.0                        | 11                            | 9                            | 2              | sw.            |                       |                          |
| Columbus.....          | Franklin.....   | 918              | 34                      | 23.4                                | -7.6    | 55                         | 26      | -7    | 10                        | 32     | 1.53                       | -1.54                 | 6.8                        | 10.1                          | 13                           | 8              | 13             | U. S. Weather Bureau. |                          |
| Coshocton.....         | Coshocton.....  | 770              | 3                       | 22.0                                | -2.5    | 53                         | 17      | -9    | 4                         | 29     | 1.46                       | 0.58                  | 5.0                        | 9                             | 9                            | 9              | w.             |                       |                          |
| Dayton (1).....        | Montgomery..... | 899              | 23                      | 23.2                                | -7.5    | 53                         | 17      | -9    | 4                         | 29     | 2.14                       | -0.94                 | 1.08                       | 12.3                          | 10                           | 11             | 7              | 11                    | U. S. Weather Bureau.    |
| Dayton (2).....        | do.....         | 790              | 31                      | 23.6                                | -6.4    | 55                         | 26      | -9    | 4                         | 34     | 2.07                       | -0.09                 | 1.00                       | 10                            | 10                           | 11             | 7              | 11                    | Mrs. Edith E. L. Boyer.  |
| Delaware.....          | Delaware.....   | 896              | 15                      | 22.2                                | -4.2    | 50                         | 26      | -8    | 10                        | 30     | 1.48                       | -1.09                 | 0.80                       | 11.3                          | 9                            | 19             | 1              | 9                     | DeWitt H. Leas.          |
| Demos.....             | Belmont.....    | 1,325            | 24                      | 24.6                                | -3.6    | 68                         | 26      | -10   | 10                        | 34     | 1.56                       | -1.29                 | 0.76                       | 5.0                           | 12                           | 11             | 7              | 11                    | J. T. Dysart.            |
| Dennison.....          | Tuscarawas..... | 846              | 2                       | 24.6                                | -3.6    | 62                         | 26      | -15   | 13                        | 52     | 1.99                       | -0.90                 | 3.4                        | 10                            | 13                           | 12             | 4              | sw.                   |                          |
| Frankfort.....         | Ross.....       | 745              | 20                      | 24.4                                | -4.7    | 59                         | 26      | -14   | 10                        | 45     | 2.10                       | -0.69                 | 0.90                       | 5.0                           | 6                            | 13             | 2              | 14                    | O. A. Cory.              |
| Gallipolis.....        | Gallia.....     | 646              | 12                      | 21.9                                | -5.9    | 50                         | 17†     | -12   | 4                         | 29     | 2.45                       | -0.60                 | 6.20                       | 6                             | 6                            | 6              | 3              | sw.                   |                          |
| Garretttsville.....    | Portage.....    | 1,005            | 28                      | 18.8                                | -5.2    | 50                         | 26      | -24   | 10                        | 44     | 1.51                       | -1.50                 | 0.31                       | 11.0                          | 14                           | 7              | 9              | S. M. Luther.         |                          |
| Granville.....         | Licking.....    | 960              | 30                      | 22.6                                | -5.0    | 59                         | 26      | -13   | 11                        | 42     | 2.19                       | -0.81                 | 0.60                       | 12.3                          | 12                           | 13             | 3              | 13                    | Dr. L. E. Davis.         |
| Gratiot.....           | do.....         | 1,000            | 23                      | 22.5                                | -5.8    | 57                         | 26      | -11   | 9                         | 36     | 2.53                       | -0.55                 | 1.16                       | 10.4                          | 12                           | 9              | 10             | 10                    | W. B. Longstreth.        |
| Green.....             | Adams.....      | 500              | 19                      | 27.5                                | -3.7    | 64                         | 25      | -7    | 6                         | 42     | 2.71                       | -0.66                 | 1.10                       | 3.0                           | 5                            | 15             | 12             | 12                    | W. F. Kenyon.            |
| Green Hill.....        | Columbiana..... | 1,135            | 19                      | 20.0                                | -3.5    | 55                         | 26      | -10   | 10                        | 45     | 1.39                       | -1.12                 | 0.65                       | 9.1                           | 10                           | 8              | 14             | Jos. E. Bentley.      |                          |
| Greenville.....        | Darke.....      | 1,060            | 26                      | 21.9                                | -5.9    | 50                         | 17†     | -12   | 4                         | 29     | 1.77                       | -0.83                 | 0.62                       | 9.0                           | 5                            | 10             | 9              | 10                    | Geo. A. Katzenberger.    |
| Hamilton.....          | Butler.....     | 601              | 700                     | 24.3                                | -5.6    | 65                         | 26      | -12   | 9†                        | 42     | 2.33                       | -0.43                 | 1.30                       | 3.5                           | 10                           | 19             | 1              | 9                     | Earl W. Stout.           |
| Haydenville.....       | Hocking.....    | 700              | 23                      | 24.8                                | -5.3    | 50                         | 25      | -10   | 4                         | 36     | 3.11                       | +0.43                 | 1.13                       | 12.5                          | 12                           | 15             | 6              | 8                     | H. W. Stiers.            |
| Hillsboro.....         | Highland.....   | 1,063            | 33                      | 24.8                                | -5.3    | 50                         | 25      | -11   | 5                         | 37     | 2.89                       | -0.75                 | 1.06                       | 5.0                           | 6                            | 13             | 4              | 12                    | Carey H. Roush.          |
| Ironton.....           | Lawrence.....   | 575              | 29                      | 30.0                                | -3.7    | 66                         | 26      | -3    | 6                         | 42     | 1.93                       | -1.32                 | 0.85                       | 10.0                          | 4                            | 12             | 9              | 8                     | James Bull.              |
| Jacksonburg.....       | Butler.....     | 975              | 24                      | 24.8                                | -4.5    | 53                         | 17†     | -10   | 4                         | 33     | 2.59                       | -0.39                 | 0.60                       | 13.0                          | 7                            | 9              | 10             | 10                    | Dr. J. B. Owsley.        |
| Kenton.....            | Hardin.....     | 1,015            | 20                      | 20.0                                | -7.4    | 48                         | 18†     | -20   | 13                        | 43     | 2.59                       | -0.35                 | 0.80                       | 10.4                          | 14                           | 15             | 9              | 5                     | N. S. Martin.            |
| Killbuck.....          | Holmes.....     | 1,087            | 19                      | 22.3                                | -2.7    | 55                         | 26      | -15   | 13                        | 40     | 2.12                       | -0.42                 | 1.30                       | 6.5                           | 8                            | 11             | 4              | 14                    | Lloyd C. Schonauer.      |
| Laneaster.....         | Fairfield.....  | 898              | 17                      | 25.0                                | -3.9    | 63                         | 26      | -10   | 10                        | 44     | 2.51                       | -0.50                 | 1.16                       | 8.6                           | 10                           | 7              | 7              | 15                    | R. L. Renshaw.           |
| McConnellsville.....   | Morgan.....     | 710              | 28                      | 24.4                                | -5.9    | 64                         | 26      | -9    | 10                        | 39     | 2.31                       | -0.69                 | 1.16                       | 5.0                           | 11                           | 8              | 9              | 12                    | C. H. Morris.            |
| Marietta.....          | Washington..... | 627              | 92                      | 27.9                                | -5.9    | 63                         | 26      | -5    | 10                        | 57     | 1.82                       | -1.36                 | 0.85                       | 4.2                           | 11                           | 8              | 9              | 12                    | Prof. T. D. Biscoe.      |
| Marion.....            | Marion.....     | 980              | 34                      | 22.6                                | -3.5    | 50                         | 17      | -12   | 10                        | 44     | 3.01                       | +0.63                 | 1.30                       | 15.3                          | 11                           | 8              | 12             | 9                     | sw.                      |
| Mildford.....          | Knock.....      | 1,200            | 20                      | 21.0                                | -2.8    | 51                         | 26      | -18   | 10                        | 42     | 1.84                       | -0.46                 | 0.61                       | 10.0                          | 7                            | 14             | 5              | 10                    | W. H. Burgess.           |
| Milligan.....          | Perry.....      | 875              | 19                      | 22.6                                | -5.0    | 64                         | 26      | -18   | 9†                        | 46     | 2.03                       | -0.58                 | 1.00                       | 3.5                           | 7                            | 9              | 12             | 8                     | V. C. Eveland.           |
| Milport.....           | Columbiana..... | 1,145            | 19                      | 20.8                                | -3.9    | 54                         | 26      | -18   | 10                        | 44     | 1.69                       | -0.75                 | 0.60                       | 9.5                           | 12                           | 3              | 13             | G. F. Copeland.       |                          |
| Nellie.....            | Coshceton.....  | 850              | 12                      | 21.8                                | -4.5    | 49                         | 18†     | -15   | 13                        | 46     | 1.50                       | -1.16                 | 0.50                       | 10.0                          | 12                           | 16             | 6              | 7                     | Ethel L. Gammertsfelder. |
| New Alexandria.....    | Jefferson.....  | 1,050            | 27                      | 23.0                                | -5.7    | 59                         | 26      | -12   | 10                        | 33     | 2.00                       | -1.46                 | 0.40                       | 7.0                           | 8                            | 15             | 3              | 11                    | Mrs. Mary K. Pennell.    |
| New Berlin.....        | Stark.....      | 1,100            | 19                      | 20.1                                | -3.8    | 55                         | 26      | -19   | 10                        | 39     | 1.25                       | -0.56                 | 0.50                       | 5.0                           | 9                            | 15             | 2              | 12                    | Clayton Holl.            |
| New Waterford.....     | Columbiana..... | 1,053            | 17                      | 20.6                                | -3.2    | 50                         | 25†     | -17   | 13                        | 49     | 2.03                       | -0.62                 | 0.85                       | 7.5                           | 8                            | 6              | 22             | 1                     | sw.                      |
| O. S. University.....  | Franklin.....   | 757              | 29                      | 22.8                                | -5.5    | 55                         | 26      | -10   | 10                        | 39     | 1.68                       | -1.27                 | 0.95                       | 8.6                           | 11                           | 9              | 16             | 4                     | w.                       |
| Pataskala.....         | Licking.....    | 1,015            | 20                      | 22.0                                | -4.3    | 58                         | 26      | -13   | 10                        | 35     | 2.03                       | -0.74                 | 1.29                       | 4.0                           | 10                           | 5              | 14             | 10                    | sw.                      |
| Peebles.....           | Adams.....      | 645              | 1                       | 27.0                                | -6.3    | 63                         | 26      | -12   | 6                         | 43†    | 3.06                       | -0.52                 | 1.29                       | 4.0                           | 10                           | 5              | 14             | Ora O. Smalley.       |                          |
| Philo.....             | Muskingum.....  | 1,018            | 17                      | 24.0                                | -4.8    | 63                         | 26      | -10   | 10                        | 37     | 1.70                       | -0.52                 | 0.76                       | 5.9                           | 8                            | 9              | 10             | 19                    | Harry L. Roberts.        |
| Piqua.....             | Miami.....      | 847              | 2                       | 22.0                                | -4.0    | 53                         | 26      | -11   | 4                         | 32     | 2.01                       | -0.65                 | 0.68                       | 12.5                          | 8                            | 7              | 3              | 19                    | F. E. Stewart.           |
| Plattsburg.....        | Clark.....      | 1,130            | 19                      | 22.0                                | -4.0    | 53                         | 26      | -11   | 4                         | 32     | 2.01                       | -0.65                 | 0.70                       | 9.0                           | 6                            | 14             | 4              | 11                    | Dr. H. A. Schirrmann.    |
| Portsmouth.....        | Scioto.....     | 527              | 81                      | 25.3                                | -7.3    | 61                         | 21      | -5    | 10                        | 41     | 2.89                       | -0.10                 | 1.01                       | 4.0                           | 7                            | 10             | 3              | 13                    | Neil J. Gast.            |
| Prospect.....          | Marion.....     | 909              | 2                       | 22.0                                | -5.5    | 54                         | 26      | -17   | 10                        | 28     | 0.98                       | -1.48                 | 0.34                       | 4.5                           | 4                            | 11             | 4              | 14                    | J. B. Gish.              |
| Rittiman.....          | Wayne.....      | 990              | 19                      | 21.3                                | -2.5    | 54                         | 26      | -18   | 10                        | 41     | 1.80                       | -0.52                 | 0.67                       | 13.1                          | 10                           | 4              | 17             | 8                     | sw.                      |
| Shenandoah.....        | Richland.....   | 1,100            | 20                      | 19.6                                | -3.5    | 50                         | 17      | -18   | 10                        | 41     | 2.26                       | -0.58                 | 1.10                       | 9.7                           | 10                           | 13             | 6              | 10                    | Hamline B. Blake.        |
| Sidney.....            | Shelby.....     | 985              | 29                      | 21.8                                | -4.4    | 53                         | 18      | -11   | 10                        | 39     | 2.26                       | -0.52                 | 0.50                       | 11.0                          | 10                           | 11             | 9              | 9                     | Miss M. W. C. Sheridan.  |
| Somerset.....          | Perry.....      | 1,080            | 13                      | 25.0                                | -3.0    | 61                         | 26      | -8    | 10                        | 34     | 1.66                       | -0.34                 | 1.25                       | —                             | 10                           | 14             | 5              | sw.                   |                          |
| Springfield.....       | Clark.....      | 980              | 18                      | 22.0                                | -5.6    | 55                         | 26      | -12   | 4                         | 41     | 2.26                       | -0.34                 | 1.25                       | 6.5                           | 8                            | 2              | 23             | 4                     | sw.                      |
| Summerfield.....       | Noble.....      | 1,187            | 6                       | 23.8                                | -6.4    | 64                         | 26      | -12   | 13                        | 47     | 1.59                       | -0.72                 | 6.1                        | 12                            | 9                            | 12             | 8              | sw.                   |                          |
| Sy tacuse.....         | Gallia.....     | 533              | 1                       | 26.9                                | -65     | 52                         | 26      | -3    | 11                        | 39     | 2.90                       | -0.44                 | 0.80                       | 4.0                           | 5                            | 10             | 8              | 11                    | E. G. Campbell.          |
| Thurman.....           | Champaign.....  | 1,031            | 44                      | 21.1                                | -4.6    | 51                         | 17†     | -12   | 4                         | 41     | 2.66                       | +0.36                 | 1.08                       | 15.6                          | 10                           | 7              | 15             | 7                     | sw.                      |
| Warren.....            | Trumbull.....   | 900              | 23                      | 21.4                                | -4.1    | 48                         | 26      | -14   | 10                        | 41     | 1.73                       | -1.43                 | 0.43                       | 10.9                          | 12                           | 8              | 11             | 16                    | D. D. Thomas.            |
| Waverly.....           | Pike.....       | 590              | 29                      | 26.2                                | -6.1    | 64                         | 26      | -10   | 10                        | 43     | 2.63                       | -0.93                 | 1.10                       | 6.9                           | 10                           | 12             | 1              | 16                    | Prof. J. H. Williams.    |
| Waynesville.....       | Warren.....     | 700              | 27                      | 23.0                                | -5.0    | 55                         | 26      | -12   | 4                         | 34     | 2.04                       | -0.90                 | 1.10                       | 5.5                           | 5                            | 11             | 6              | 12                    | M. D. McCorkle.          |
| Wooster.....           | Vanderburg..... | 1,030            | 33                      | 20.5                                | -5.3    | 55                         | 26      | -16   | 10                        | 43     | 1.58                       | -1.31                 | 0.72                       | 11.7                          | 9                            | 8              | 4              | 17                    | Dr. Peru Hutt.           |
| Youngstown.....        | Fairborn.....   | 846              | 19                      | 22.0                                | -4.1    | 56                         | 18      | -6    | 4                         | 26     | 2.45                       | -0.49                 | 0.90                       | 13.5                          | 6                            | 12             | 2              | 15                    | Charles Michener.        |
| Zanesville.....        | Mahoning.....   | 700              | 25                      | 22.8                                | -5.5    | 49                         | 17†     | -11   | 4                         | 33     | 2.11                       | -0.57                 | 0.78                       | 5.6                           | 8                            | 10             | 0              | 19                    | Experiment Station.      |
| <b>Indiana.</b>        |                 |                  |                         |                                     |         |                            |         |       |                           |        |                            |                       |                            |                               |                              |                |                |                       |                          |
| Anderson.....          | Madison.....    | 892              | 17                      | 21.7                                | -5.4    | 53                         | 17      | -11   | 4                         | 32     | 2.59                       | +0.39                 | 1.50                       | 11.8                          | 6                            | 13             | 7              | 9                     | W. H. Stanton.           |
| Attica.....            | Fountain.....   | 522              | 2                       | 22.0                                | -6.0    | 54                         | 17      | -15   | 4                         | 37     | 3.17                       | -0.13                 | 1.70                       | 25.0                          | 13                           | 6              | 15             | 14                    | Robt. E. Ray.            |
| Bloomington.....       | Monroe.....     | 744              | 22                      | 26.6                                | -7.7    | 53                         | 26      | -10   | 10                        | 39     | 3.69                       | -0.50                 | 1.35                       | 18.8                          | 9                            | 8              | 6              | 15                    | Earl E. Ramsey.</td      |

TABLE 1.—Climatological data for February, 1912. District No. 3—Continued.

| Stations.                 | Counties.    | Elevation, feet. | Length of record, years. | Temperature, in degrees Fahrenheit. |                            |          |       |                   |       | Precipitation, in inches. |        |                            |                       |                             |  | Sky.                  | Prevailing wind direction.    | Observers.             |                       |                          |
|---------------------------|--------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|-------------------|-------|---------------------------|--------|----------------------------|-----------------------|-----------------------------|--|-----------------------|-------------------------------|------------------------|-----------------------|--------------------------|
|                           |              |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest.           | Date. | Greatest daily range.     | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall, unadjusted. | Number of rainy days, 0.10 inch or more. | Number of clear days. | Number of partly cloudy days. | Number of cloudy days. |                       |                          |
| <i>Indiana—Continued.</i> |              |                  |                          |                                     |                            |          |       |                   |       |                           |        |                            |                       |                             |  |                       |                               |                        |                       |                          |
| Nashville.                | Brown.       | 26.              | 4                        | 57                                  | 24                         | — 12     | 4     | 43                | 3.47  | + 0.09                    | 1.81   | 12.0                       | 8                     | 12                          | 8  | 1                     | sw.                           | W. C. Goble.           |                       |                          |
| Paoli.                    | Orange.      | 611              | 15                       | 25.2                                | — 5.2                      | 55       | 17    | — 13              | 4     | 39                        | 3.47   | + 0.38                     | 1.67                  | 17.5                        | 7  | 13                    | 5                             | 1                      | ne.                   | James A. Gillum.         |
| Princeton.                | Gibson.      | 481              | 30                       | 26.8                                | — 5.5                      | 55       | 18    | — 9               | 4     | 26                        | 3.06   | + 1.33                     | 0.35                  | 5.6                         | 9  | 8                     | 12                            | 5                      | nw.                   | Albert Mills.            |
| Richmond.                 | Wayne.       | 972              | 27                       | 21.6                                | — 6.7                      | 51       | 17    | — 11              | 9     | 36                        | 1.30   | + 1.00                     | 14.0                  | 3                           | 14                                       | 5                     | 1                             | sw.                    | Walter Vossler.       |                          |
| Rochester.                | Fulton.      | 775              | 7                        | 21.8                                | —                          | 44       | 19    | — 11              | 10    | 31                        | 1.40   | + 0.97                     | 1.74                  | 7.0                         | 7  | 9                     | 4                             | 1                      | w.                    | G. P. Keith.             |
| Rockville.                | Parke.       | 722              | 26                       | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.97                     | 1.74                  | 7.0                         | 7  | 9                     | 4                             | 1                      | sw.                   | C. A. Lee.               |
| Rome.                     | Perry.       | 370              | 9                        | 29.8                                | —                          | 60       | 17    | — 7               | 4     | 35                        | 2.98   | + 0.97                     | 1.74                  | 7.0                         | 7  | 9                     | 4                             | 1                      | w.                    | Adam Anspach.            |
| Salamonia.                | Jay.         | 7                | 19                       | 19.2                                | —                          | 52       | 18    | — 14              | 4     | 47                        | 3.18   | + 0.97                     | 1.74                  | 7.0                         | 7  | 9                     | 4                             | 1                      | w.                    | S. A. Armstrong.         |
| Salem.                    | Washington.  | 717              | 19                       | 24.8                                | — 6.6                      | 52       | 17    | — 13              | 4     | 37                        | 3.36   | + 0.97                     | 1.74                  | 7.0                         | 7  | 5                     | 15                            | 9                      | w.                    | Emmet S. Allen.          |
| Scottsburg.               | Scott.       | 570              | 18                       | 27.4                                | — 4.5                      | 55       | 17    | — 8               | 4     | 27                        | 3.63   | + 0.55                     | 1.86                  | 6.0                         | 7  | 6                     | 10                            | 13                     | w.                    | Frank H. Park.           |
| Seymour.                  | Jackson.     | 610              | 25                       | 26.8                                | — 4.7                      | 57       | 17    | — 14              | 4     | 40                        | 3.73   | + 0.10                     | 1.53                  | 11.8                        | 6  | 14                    | 9                             | nw.                    | J. Robt. Blair.       |                          |
| Shelbyville.              | Shelby.      | 768              | 8                        | 23.1                                | —                          | 54       | 17    | — 13              | 4     | 34                        | 1.88   | + 0.93                     | 10.0                  | 8                           | 8  | 11                    | 10                            | w.                     | Edgar G. Hodson.      |                          |
| Shoals.                   | Martin.      | 523              | 5                        | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.97                     | 9.1                   | 7                           | 4  | 13                    | 13                            | nw.                    | Rev. G. Halleck Rowe. |                          |
| Terre Haute.              | Vigo.        | 498              | 22                       | 24.5                                | — 6.1                      | 53       | 18    | — 12              | 4     | 29                        | 2.42   | + 0.17                     | 1.54                  | 16.7                        | 6  | 12                    | 4                             | 13                     | nw.                   | Prof. R. G. Gillum.      |
| Veedersburg.              | Fountain.    | 612              | 13                       | 24.0                                | — 2.4                      | 58       | 18    | — 14              | 10    | 33                        | 3.23   | + 0.97                     | 2.00                  | 23.5                        | 7  | 15                    | 8                             | 6                      | w.                    | L. A. Culver, Jr.        |
| Vevey.                    | Switzerland. | 525              | 31                       | 26.2                                | — 7.5                      | 55       | 18    | — 10              | 4     | 34                        | 2.83   | + 1.23                     | 1.20                  | 8.0                         | 5  | 9                     | 15                            | 12                     | ne.                   | Miss Frederica Boerner.  |
| Vincennes.                | Knox.        | 431              | 20                       | 27.0                                | — 2.6                      | 57       | 18    | — 11              | 4     | 28                        | 4.06   | + 1.05                     | 1.56                  | 19.5                        | 8  | 15                    | 1                             | 13                     | nw.                   | Garrett V. List.         |
| Washington.               | Daviess.     | 484              | 16                       | 26.2                                | — 4.4                      | 52       | 17†   | — 9               | 4     | 24                        | 3.73   | + 0.67                     | 1.78                  | 8.5                         | 6  | 14                    | 3                             | 12                     | nw.                   | Charles C. Feagans.      |
| Whitestown.               | Boone.       | 529              | 4                        | 20.5                                | —                          | 49       | 17    | — 10              | 4     | 29                        | 1.94   | + 0.70                     | 16.9                  | 12                          | 8  | 18                    | 3                             | w.                     | Clyde O. Laughner.    |                          |
| Winona Lake.              | Kosciusko.   | 865              | 5                        | 20.6                                | —                          | 46       | 24    | — 13              | 13    | 39                        | 1.08   | + 0.68                     | 14.3                  | 5                           | 4  | 16                    | 9                             | w.                     | Rev. Albert A. Young. |                          |
| Worthington.              | Greene.      | 526              | 30                       | 24.5                                | — 6.6                      | 52       | 17    | — 16              | 4     | 32                        | 3.11   | + 0.50                     | 0.90                  | 19.0                        | 7  | 11                    | 9                             | 9                      | w.                    | D. W. Soliday.           |
| <i>Illinois.</i>          |              |                  |                          |                                     |                            |          |       |                   |       |                           |        |                            |                       |                             |  |                       |                               |                        |                       |                          |
| Albion.                   | Edwards.     | 531              | 21                       | 26.8                                | — 4.4                      | 54       | 18    | — 10              | 4     | 29                        | 3.18   | + 0.22                     | 0.78                  | 16.3                        | 8  | 12                    | 5                             | 12                     | n.                    | B. F. Michels.           |
| Carroll.                  | White.       | 399              | 1                        | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.60                     | 1.35                  | 16.5                        | 3  | 13                    | 5                             | 11                     | —                     | Daniel Berry.            |
| Casey.                    | Clark.       | 645              | 9                        | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 1.09                     | 1.35                  | 15.5                        | 7  | 4                     | 12                            | 13                     | nw.                   | William Chenoweth.       |
| Charleston.               | Coles.       | 720              | 27                       | 24.1                                | — 5.2                      | 52       | 18    | — 11              | 4     | 27                        | 2.06   | + 0.41                     | 1.12                  | 18.8                        | 11                                       | 12                    | 5                             | 12                     | w.                    | Jacob B. Daisy.          |
| Danville.                 | Vermilion.   | 604              | 11                       | 24.0                                | — 3.1                      | 54       | 18    | — 9               | 4     | 29                        | 2.23   | + 0.41                     | 1.12                  | 18.8                        | 11                                       | 12                    | 5                             | 12                     | sw.                   | J. J. Lemon.             |
| Equality.                 | Gallatin.    | 421              | 14                       | 31.2                                | — 2.6                      | 60       | 18    | — 6               | 4     | 29                        | 3.73   | + 0.47                     | 1.08                  | 11.3                        | 6  | 16                    | 3                             | 10                     | n.                    | Dr. L. W. Gordon.        |
| Fairfield.                | Wayne.       | 495              | 19                       | 27.9                                | — 4.2                      | 58       | 18    | — 10              | 4     | 29                        | 3.09   | + 0.71                     | 1.00                  | 14.6                        | 7  | 10                    | 9                             | 10                     | nw.                   | George A. Tromly.        |
| Flora.                    | Clay.        | 495              | 26                       | 25.6                                | — 5.1                      | 50       | 19    | — 10              | 4     | 31                        | 2.21   | + 0.54                     | 1.00                  | 15.5                        | 6  | 12                    | 4                             | 13                     | nw.                   | Joseph S. Peak.          |
| Golconda.                 | Pope.        | 500              | 34                       | 31.3                                | — 4.7                      | 68       | 18    | — 5               | 4     | 37                        | 3.90   | + 0.01                     | 1.62                  | 4.5                         | 7  | 11                    | 7                             | 11                     | sw.                   | Dr. D. Lawrence.         |
| Hoopston.                 | Vermilion.   | 715              | 10                       | 22.3                                | —                          | 50       | 18    | — 10              | 4     | 26                        | 2.11   | + 0.77                     | 0.95                  | 16.1                        | 11                                       | 14                    | 7                             | 8                      | n.                    | S. F. Hoskinson.         |
| McLeansboro.              | Hamilton.    | 462              | 29                       | 28.3                                | — 5.2                      | 58       | 18    | — 9               | 4     | 32                        | 2.75   | + 0.63                     | 1.20                  | 14.0                        | 8  | 10                    | 7                             | 12                     | nw.                   | Prof. W. C. Fairweather. |
| Metropolis.               | Massac.      | 346              | 1                        | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.97                     | 1.20                  | 10.0                        | 5  | 12                    | 7                             | 10                     | nw.                   | Lloyd Kimbrell.          |
| Monroe.                   | Effingham.   | 599              | 12                       | 23.9                                | — 3.9                      | 56       | 18    | — 16              | 4     | 36                        | 1.70   | + 0.35                     | 0.90                  | 22.5                        | 10                                       | 8                     | 17                            | 0                      | nw.                   | J. C. Spitzer.           |
| Mount Carmel.             | Wabash.      | 429              | 11                       | 26.2                                | — 3.9                      | 56       | 18    | — 9               | 4     | 36                        | 4.25   | + 0.70                     | 1.28                  | 8.7                         | 8  | 17                    | 0                             | 12                     | nw.                   | Mrs. H. M. Phillips.     |
| New Burnside.             | Johnson.     | 613              | 17                       | 30.1                                | — 3.6                      | 60       | 18    | — 8               | 4     | 31                        | —      | + 0.47                     | 1.08                  | 15.0                        | 5  | 16                    | 3                             | 11                     | nw.                   | Thomas H. McCabe.        |
| Newton.                   | Jasper.      | 484              | 1                        | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.47                     | 1.08                  | 1.1                         | 6  | 6                     | 17                            | 4                      | n.                    | J. M. Hicks.             |
| Olney.                    | Richland.    | 486              | 25                       | 27.2                                | — 5.1                      | 59       | 18    | — 12              | 4     | 30                        | 2.08   | + 0.80                     | 0.8                   | 11.6                        | 6  | 13                    | 6                             | 10                     | nw.                   | Victor E. Phillips.      |
| Palestine.                | Crawford.    | 500              | 30                       | 25.6                                | — 5.0                      | 55       | 18    | — 15              | 4     | 29                        | 2.16   | + 1.03                     | 1.32                  | 15.0                        | 5  | 7                     | 11                            | 11                     | nw.                   | Duane Shaw.              |
| Paris.                    | Edgar.       | 800              | 19                       | 23.4                                | — 4.0                      | 56       | 18    | — 11              | 4     | 37                        | 1.22   | + 1.15                     | 0.80                  | 8.7                         | 5  | 18                    | 6                             | 10                     | nw.                   | H. P. Twyman.            |
| Philo.                    | Champaign.   | 700              | 28                       | 22.0                                | — 4.5                      | 50       | 18    | — 10              | 4     | 27                        | 2.20   | + 0.17                     | 1.10                  | 16.0                        | 8  | 11                    | 10                            | 10                     | nw.                   | H. A. Burr.              |
| Rantoul.                  | ...do.       | 768              | 21                       | 19.0 <sup>b</sup>                   | — 5.7                      | 51       | 17†   | — 10 <sup>d</sup> | 4†    | 32 <sup>d</sup>           | 1.12   | + 0.89                     | 0.54                  | 11.2                        | 5  | 11                    | 7                             | 11                     | nw.                   | William Breiner.         |
| Rileyville.               | Saline.      | 400              | 15                       | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 1.97                     | 0.70                  | 12.5                        | 6  | 12                    | 3                             | 14                     | n.                    | W. H. Thornberry.        |
| Shawneetown.              | Gallatin.    | 307              | 3                        | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.76                     | 1.12                  | 1.12                        | 7  | 12                    | 3                             | 14                     | n.                    | Mrs. Mary O. Spivey.     |
| Sumner.                   | Lawrence.    | 459              | 6                        | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.97                     | 1.20                  | 2.60                        | 1.12                                     | 2.4                   | 7                             | 12                     | n.                    | O. A. Fyffe.             |
| Tuscola.                  | Douglas.     | 644              | 19                       | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.63                     | 1.20                  | 2.60                        | 1.12                                     | 2.4                   | 7                             | 12                     | n.                    | E. W. Lester.            |
| Urbana.                   | Champaign.   | 725              | 10                       | 21.5                                | — 4.6                      | 49       | 18    | — 10              | 4     | 24                        | 2.28   | + 0.02                     | 1.04                  | 16.5                        | 8  | 2                     | 20                            | 7                      | sw.                   | Prof. J. G. Mosier.      |
| <i>Kentucky.</i>          |              |                  |                          |                                     |                            |          |       |                   |       |                           |        |                            |                       |                             |  |                       |                               |                        |                       |                          |
| Alpha.                    | Clinton.     | 18               | 33.8                     | — 3.8                               | 61                         | 19       | — 2   | 4                 | 33    | 4.63                      | + 0.52 | 1.75                       | 1.3                   | 7                           | 9  | 6                     | 14                            | n.                     | W. W. Hicks.          |                          |
| Anchorage.                | Jefferson.   | 700              | 11                       | 26.2                                | — 6.0                      | 54       | 17†   | — 10              | 4     | 36                        | 2.78   | + 0.47                     | 1.63                  | 3.0                         | 3  | 8                     | 18                            | 3                      | nw.                   | C. E. Barrett.           |
| Bardstown.                | Nelson.      | 637              | 15                       | 30.0                                | — 4.5                      | 57       | 17†   | — 8               | 4     | 40                        | 2.75   | + 1.41                     | 1.80                  | 9.5                         | 5  | 10                    | 19                            | 19                     | sw.                   | G. M. Talbott.           |
| Beattyville.              | Lee.         | 650              | 8                        | 28.6                                | —                          | 66       | 19    | — 6               | 6     | 49                        | 3.60   | + 0.84                     | 1.04                  | 7.0                         | 11                                       | 8                     | 1                             | 20                     | w.                    | G. W. Cann.              |
| Beaver Dam.               | Ohio.        | 441              | 9                        | 30.8                                | —                          | 64       | 17    | — 6               | 4     | 36                        | 3.33   | + 0.84                     | 1.80                  | 2.0                         | 3  | 12 <sup>a</sup>       | 9 <sup>a</sup>                | nw.                    | W. T. Austin.         |                          |
| Berea.                    | Madison.     | 1,070            | 11                       | 30.8                                | — 4.1                      | 62       | 21†   | — 6               | 4     | 44                        | 2.56   | + 0.99                     | 1.20                  | 4.1                         | 10                                       | 6                     | 11                            | 12                     | sw.                   | C. F. Rumold.            |
| Blandville.               | Ballard.     | 445              | 31                       | 32.2                                | — 4.2                      | 61       | 18    | — 2               | 4     | 29                        | 4.91   | + 0.15                     | 2.20                  | 2.7                         | 8  | 6                     | 11                            | 12                     | n.                    | E. W. Horr.              |
| Bowling Green.            | Warren.      | 500              | 23                       | 31.9                                | — 5.3                      | 61       | 18    | — 5               | 4     | 42                        | 2.99   | + 1.16                     | 1.60                  | 2.5                         | 8  | 13                    | 2                             | 14                     | n.                    | Mrs. L. G. Causey.       |
| Burnside.                 | Pulaski.     | 773              | 21                       | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.71                     | 1.20                  | 0.4                         | 6  | 9                     | 5                             | 15                     | nw.                   | G. M. Estes.             |
| Catlettsburg.             | McLean.      | 544              | 23                       | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.69                     | 1.10                  | 5.0                         | 7  | 14                    | 3                             | 12                     | w.                    | W. A. Taylor.            |
| Earlington.               | Hopkins.     | 370              | 22                       | 30.3                                | — 6.1                      | 63       | 17    | — 5               | 4     | 35                        | 3.06   | + 0.34                     | 2.07                  | 2.5                         | 13                                       | 2                     | 14                            | nw.                    | Mrs. Merle M. Bruns.  |                          |
| Edmonton.                 | Metcalfe.    | 600              | 21                       | 32.2                                | — 4.2                      | 62       | 19    | — 5               | 4     | 37                        | 3.53   | + 0.88                     | 1.00                  | 2.3                         | 9  | 12                    | 3                             | 13                     | nw.                   | Brick Southworth.        |
| Eubank.                   | Pulaski.     | 1,177            | 18                       | 29.4                                | — 3.6                      | 62       | 19    | — 11              | 4     | 44                        | 2.90   | + 1.48                     | 1.30                  | 3.0                         | 6  | 6                     | 23                            | 3                      | ne.                   | Miss Lee Ray.            |
| Falmouth.                 | Pendleton.   | 530              | 23                       | —                                   | —                          | —        | —     | —                 | —     | —                         | —      | + 0.46                     | 1.22                  | 3.0                         | 5  | 10                    | 1                             | 18                     | n.                    | Mrs. Katie Payne.        |
| Farmers.                  | Rowan.       | 668              |                          |                                     |                            |          |       |                   |       |                           |        |                            |                       |                             |  |                       |                               |                        |                       |                          |

TABLE 1.—Climatological data for February, 1912. District No. 3—Continued.

| Stations.           | Counties.       | Elevation, feet. | Length of record, years | Temperature, in degrees Fahrenheit. |                            |          |       |         |       | Precipitation, in inches. |        |                            |                       |                             |  | Sky.                  | Prevailing wind direction.    | Observers.             |                   |                          |                  |                    |
|---------------------|-----------------|------------------|-------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|---------------------------|--------|----------------------------|-----------------------|-----------------------------|--|-----------------------|-------------------------------|------------------------|-------------------|--------------------------|------------------|--------------------|
|                     |                 |                  |                         | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range.     | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall, unadjusted. | Number of rainy days, 0.01 inch or more. | Number of clear days. | Number of partly cloudy days. | Number of cloudy days. |                   |                          |                  |                    |
| <b>Tennessee.</b>   |                 |                  |                         |                                     |                            |          |       |         |       |                           |        |                            |                       |                             |  |                       |                               |                        |                   |                          |                  |                    |
| Ashwood.....        | Maury.....      | 725              | 33                      | 36.0                                | -5.2                       | 63       | 19    | 1       | 4     | 38                        | 4.12   | -0.58                      | 1.57                  | 2.0                         | 9  | 11                    | 4                             | 14                     | w.                | Mrs. Joseph W. Fleming.  |                  |                    |
| Benton.....         | Polk.....       | 880              | 27                      | 38.4                                | -3.9                       | 67       | 26    | 2       | 4     | 43                        | 5.06   | +0.18                      | 0.80                  | 10.0                        | 11                                       | 10                    | 7                             | 12                     | n.                | George L. Williams.      |                  |                    |
| Birds Bridge.....   | Greene.....     | 6                |                         |                                     |                            |          |       |         |       |                           | 2.95   |                            | 0.67                  | 3.3                         | 12                                       | 6                     | 3                             | 20                     | s.                | David B. George.         |                  |                    |
| Bluff City.....     | Sullivan.....   | 15               |                         |                                     |                            |          |       |         |       |                           | 3.06   | -0.41                      | 0.61                  | 5.0                         | 13                                       | 11                    | 0                             | 18                     | s.                | John W. Fisher.          |                  |                    |
| Byrdstown.....      | Pickett.....    | 1,028            | 19                      | 35.0                                | -2.6                       | 63       | 18†   | -4      | 4     | 41                        | 3.36   | -0.66                      | 2.00                  | 1.5                         | 5  | 2                     | 14                            | 13                     | w.                | John Lacy.               |                  |                    |
| Carthage.....       | Smith.....      | 500              | 28                      | 36.8                                | -3.0                       | 64       | 19†   | 0       | 4     | 42                        | 3.77   | -0.86                      | 1.35                  | 2.9                         | 9  | 10                    | 1                             | 18                     | nw.               | Earl C. Pickering.       |                  |                    |
| Cedar Hill.....     | Robertson.....  | 625              | 12                      | 33.8                                | -3.1                       | 64       | 26    | -2      | 4     | 42                        | 4.18   | +0.02                      | 1.00                  | 1.7                         | 9  | 14                    | 6                             | 9                      | n.                | J. Frank Ruffin.         |                  |                    |
| Celina.....         | Clay.....       | 494              | 9                       |                                     |                            |          |       |         |       |                           | 4.14   |                            | 1.48                  | T.                          | 6  | 8                     | 0                             | 21                     | n.                | Charles M. Anderson.     |                  |                    |
| Center Point.....   | Chester.....    | 400              | 15                      |                                     |                            |          |       |         |       |                           | 4.58   | +0.82                      | 1.85                  | 1.6                         | 5  | 15                    | 1                             | 13                     | n.                | Halbert H. Bailey.       |                  |                    |
| Charleston.....     | Bradley.....    | 709              | 15                      |                                     |                            |          |       |         |       |                           | 4.02   | -1.33                      | 1.40                  | 6.0                         | 9  | 10                    | 1                             | 18                     | n.                | John T. Weeks.           |                  |                    |
| Chattanooga.....    | Hamilton.....   | 808              | 33                      | 38.9                                | -4.9                       | 70       | 26    | 5       | 4     | 35                        | 5.04   | -0.06                      | 1.88                  | 10.8                        | 14                                       | 7                     | 14                            | 8                      | nw.               | U. S. Weather Bureau.    |                  |                    |
| Clarksville.....    | Montgomery..... | 500              | 49                      | 34.0                                | -5.0                       | 61       | 18†   | -5      | 4     | 33                        | 4.81   | +0.52                      | 2.15                  | 2.9                         | 12                                       | 16                    | 5                             | 8                      | ne.               | Prof. James A. Lyon.     |                  |                    |
| Clinton.....        | Anderson.....   | 800              | 24                      |                                     |                            |          |       |         |       |                           | 4.12   | -1.46                      | 1.73                  | 1.4                         | 12                                       | 9                     | 2                             | 18                     | ne.               | Hugh Evans.              |                  |                    |
| Dandridge.....      | Jefferson.....  | 8                |                         |                                     |                            |          |       |         |       |                           | 3.06   |                            | 1.00                  | S                           | 7  | 1                     | 21                            | w.                     | James E. Swann.   |                          |                  |                    |
| Decatur.....        | Meigs.....      | 850              | 16                      | 37.4                                | -2.2                       | 66       | 19    | -3      | 4     | 44                        | 4.34   | -1.35                      | 1.92                  | 6.0                         | 13                                       |                       |                               |                        | w.                | J. Worth Lillard.        |                  |                    |
| Dickson.....        | Dickson.....    | 800              | 16                      | 34.0                                | -4.1                       | 62       | 28    | -1      | 4     | 44                        | 3.65   | -0.83                      | 1.05                  | 2.0                         | 7  | 16                    | 3                             | 10                     | s.                | Nathan R. Sugg.          |                  |                    |
| Dover.....          | Stewart.....    | 500              | 17                      | 33.5                                | -4.9                       | 62       | 18    | 0       | 4     | 38                        | 4.23   | +0.43                      | 1.77                  | 2.0                         | 7  | 11                    | 8                             | 10                     | n.                | Asa M. Tippit.           |                  |                    |
| Dunlap.....         | Squatchie.....  | 726              | 3                       | 37.9                                |                            | 68       | 26    | 2       | 4     | 38                        | 4.54   |                            | 0.90                  | 4.5                         | 13                                       | 5                     | 12                            | 12                     | w.                | S. Bradford Boyd.        |                  |                    |
| Elizabethton.....   | Carter.....     | 1,575            | 22                      |                                     |                            |          |       |         |       |                           | 2.39   | -0.95                      | 0.56                  | 4.0                         | 15                                       | 5                     | 3                             | 21                     | w.                | Charles Boyd.            |                  |                    |
| Erasmus.....        | Cumberland..... | 1,850            | 15                      | 31.6                                | -4.3                       | 63       | 19    | -10     | 5     | 50                        | 4.72   | -0.30                      | 1.14                  | 5.9                         | 9  | 8                     | 11                            | 10                     | sw.               | Mrs. Sara E. Ashley.     |                  |                    |
| Florence.....       | Rutherford..... | 500              | 30                      | 36.1                                | -4.5                       | 64       | 19    | 2       | 4     | 37                        | 4.22   | -0.48                      | 1.45                  | 2.0                         | 8  | 13                    | 5                             | 11                     | n.                | Erastus P. Bell.         |                  |                    |
| Franklin.....       | Williamson..... | 648              | 22                      | 35.8                                | -3.2                       | 62       | 26    | 2       | 4     | 34                        | 5.44   | +0.97                      | 1.81                  | 1.0                         | 7  | 11                    | 5                             | 13                     | n.                | Young M. Rizer.          |                  |                    |
| Halls Hill.....     | Rutherford..... | 10               |                         |                                     |                            |          |       |         |       |                           | 7.20   |                            | 2.42                  | 1.0                         | 10                                       | 15                    | 3                             | 11                     | n.                | Ed F. Wright.            |                  |                    |
| Harriman.....       | Roane.....      | 841              | 17                      |                                     |                            |          |       |         |       |                           | 3.50   |                            | 1.59                  | 2.04                        | 4.6                                      | 7                     | 5                             | 17                     | w.                | Robert W. Clark.         |                  |                    |
| Hohenwald.....      | Lewis.....      | 983              | 26                      | 35.5                                | -3.4                       | 64       | 26    | -2      | 4     | 41                        | 4.24   | -0.85                      | 1.35                  | 1.0                         | 6  | 14                    | 6                             | 9                      | w.                | John Lutzelman.          |                  |                    |
| Iron City.....      | Lawrence.....   | 600              | 15                      | 37.3                                | -3.0                       | 68       | 19    | 3       | 4     | 42                        | 3.96   | -1.00                      | 1.10                  | 1.5                         | 7  | .6                    | 19                            | 4                      | nw.               | Capt. H. Paul Seavy.     |                  |                    |
| Jefferson City..... | Jefferson.....  | 2                |                         |                                     |                            |          |       |         |       |                           | 3.08   |                            | 0.78                  | 9                           |  |                       |                               |                        | s.                | Calvin C. Maddox.        |                  |                    |
| Johnson City.....   | Washington..... | 1,620            | 1                       | 32.3                                | -5.7                       | 66       | 26    | -3      | 5     | 36                        | 3.20   | -0.40                      | 0.60                  | 4.7                         | 12                                       | 9                     | 3                             | 17                     | w.                | Ward Crosby.             |                  |                    |
| Johnsonville.....   | Humphreys.....  | 304              | 16                      | 35.3                                | -3.6                       | 64       | 26    | 2       | 4     | 40                        | 3.87   | -0.51                      | 1.49                  | 1.0                         | 7  | 7                     | 10                            | 12                     | sw.               | Miss Sallie B. Matthews. |                  |                    |
| Kingston.....       | Roane.....      | 21               |                         |                                     |                            |          |       |         |       |                           | 3.91   | -1.58                      | 1.90                  | 2.5                         | 10                                       | 11                    | 0                             | 18                     | n.                | Henry Crumbliss.         |                  |                    |
| Knoxville.....      | Knox.....       | 977              | 41                      | 36.1                                | -4.7                       | 67       | 26    | 5       | 4     | 35                        | 2.96   | -2.12                      | 1.50                  | 2.3                         | 10                                       | 4                     | 14                            | 11                     | ne.               | U. S. Weather Bureau.    |                  |                    |
| Lebanon.....        | Wilson.....     | 522              | 3                       | 35.7                                |                            | 64       | 19    | 0       | 4     | 40                        | 3.99   |                            | 1.53                  | 1.0                         | 8  | 7                     | 7                             | 15                     | n.                | H. Logan Fields.         |                  |                    |
| Lewisburg.....      | Marshall.....   | 727              | 17                      | 36.8                                | -3.5                       | 68       | 19    | 0       | 11    | 44                        | 6.18   | +1.32                      | 2.00                  | 1.3                         | 8  | 12                    | 7                             | 10                     | n.                | Dr. Robert D. Crutcher.  |                  |                    |
| Livingston.....     | Overton.....    | 1,065            | 1                       |                                     |                            |          |       |         |       |                           | 3.50   |                            | 1.59                  | 2.04                        | 4.6                                      | 7                     | 5                             | 17                     | w.                | Robert W. Clark.         |                  |                    |
| Loudon.....         | Loudon.....     | 816              | 9                       |                                     |                            |          |       | 2       | 4     | 38                        | 5.48   | +0.15                      | 2.90                  | 1.0                         | 6  | 15                    | 6                             | 8                      | n.                | Col. James H. Burrow.    |                  |                    |
| Lynnville.....      | Giles.....      | 770              | 24                      | 36.0                                | -4.2                       | 65       | 19    | -2      | 4     | 38                        | 2.80   |                            | 0.75                  | 3.0                         | 9  | 10                    | 0                             | 19                     | s.                | Miss Alice L. Headrick.  |                  |                    |
| McGhee.....         | Monroe.....     | 8                |                         |                                     |                            |          |       |         |       |                           | 4.77   | +0.66                      | 1.25                  | 4.5                         | 11                                       | 3                     | 16                            | 10                     | ne.               | J. Tilden Sparkman.      |                  |                    |
| McMinnville.....    | Warren.....     | 1,011            | 28                      | 36.4                                | -4.8                       | 67       | 19    | -1      | 4     | 40                        | 3.47   | -1.43                      | 1.55                  | 3.0                         | 7  | 12                    | 7                             | 10                     | w.                | Mrs. Sam T. Broyles.     |                  |                    |
| Maryville.....      | Blount.....     | 1,050            | 18                      | 38.0                                | -1.9                       | 65       | 26    | 6       | 4     | 35                        | 2.33   | -1.59                      | 0.50                  | 8.0                         | 6  | 12                    | 10                            | 7                      | w.                | Edward E. Barry.         |                  |                    |
| Mountain City.....  | Johnson.....    | 2,486            | 15                      | 30.9                                | -2.1                       | 65       | 26    | -15     | 5     | 44                        | 4.21   | -0.25                      | 2.32                  | 1.7                         | 8  | 10                    | 7                             | 12                     | w.                | U. S. Weather Bureau.    |                  |                    |
| Nashville.....      | Davidson.....   | 654              | 41                      | 35.6                                | -5.5                       | 63       | 25    | 0       | 4     | 35                        | 4.01   | -1.12                      | 0.58                  | 4.8                         | 12                                       | 7                     | 3                             | 19                     | w.                | Dr. Charles T. Burnett.  |                  |                    |
| Newport.....        | Cooke.....      | 1,280            | 22                      | 36.1                                | -2.4                       | 69       | 26    | 7       | 4     | 35                        | 3.00   |                            | 2.13                  | 3.0                         | 8  | 11                    | 1                             | 17                     | nw.               | Burl W. Buttram.         |                  |                    |
| New River.....      | Scott.....      | 1,215            | 5                       |                                     |                            |          |       |         |       |                           | 4.01   |                            | 2.00                  | 2.5                         | 9  | 10                    | 8                             | 11                     | n.                | Mrs. Ross Woods.         |                  |                    |
| Palmetto.....       | Bedford.....    | 770              | 19                      | 36.8                                | -3.1                       | 67       | 19    | 2       | 11    | 42                        | 5.98   | +1.55                      | 2.11                  | 2.5                         | 20                                       | 8                     | 14                            | 6                      | n.                | Oliver C. Kirksey.       |                  |                    |
| Perryville.....     | Decatur.....    | 387              | 15                      | 37.4                                | -1.8                       | 67       | 26    | 2       | 4     | 41                        | 5.62   | +1.66                      | 2.02                  | 2.0                         | 8  | 14                    | 6                             | 9                      | n.                | Miss Carrie Cash.        |                  |                    |
| Pinewood.....       | Hickman.....    | 5                |                         |                                     |                            |          |       | -2      | 11    | 47                        | 5.26   |                            | 1.84                  | 1.5                         | 7  | 18                    | 3                             | 8                      | s.                | Fred Beal.               |                  |                    |
| Rogersville.....    | Hawkins.....    | 1,150            | 27                      | 35.6                                | -3.0                       | 66       | 26    | -1      | 5     | 35                        | 3.44   | -1.97                      | 0.74                  | 2.5                         | 13                                       | 9                     | 11                            | w.                     | Samuel G. Wilson. |                          |                  |                    |
| Rugby.....          | Morgan.....     | 1,410            | 24                      | 32.0                                | -4.8                       | 65       | 26    | -8      | 4     | 36                        | 4.87   | -0.40                      | 1.73                  | 7.0                         | 9  | 6                     | 5                             | 18                     | n.                | W. H. Carrington.        |                  |                    |
| Savannah.....       | Hardin.....     | 442              | 28                      | 38.0                                | -3.9                       | 67       | 26    | 5       | 4     | 29                        | 4.54   | -0.42                      | 1.43                  | 4.8                         | 12                                       | 6                     | 14                            | 5                      | n.                | Herbert O. Eckel.        |                  |                    |
| Sevierville.....    | Sevier.....     | 6                |                         |                                     |                            |          |       | 70      | 26    | 8                         | 4      | 36                         | 3.01                  |                             | 0.66                                     | 3.2                   | 14                            | 0                      | 8                 | sw.                      | Oliver C. Boyd.  |                    |
| Sewanee.....        | Franklin.....   | 2,000            | 16                      | 34.4                                | -3.8                       | 60       | 17    | -5      | 4     | 37                        |        |                            |                       | 4.0                         | 11                                       | 5                     | 13                            | 13                     | n.                | Arthur H. Noll.          |                  |                    |
| Sparta.....         | White.....      | 920              | 6                       | 36.2                                |                            | 66       | 18    | -4      | 5     | 39                        | 4.65   |                            | 2.00                  | 3.4                         | 11                                       | 10                    | 7                             | 12                     | w.                | Ernest H. Hull.          |                  |                    |
| Springville.....    | Henry.....      | 377              | 9                       | 33.5                                | -5.4                       | 63       | 26    | 0       | 4     | 40                        | 4.41   | +0.04                      | 2.55                  | 2.6                         | 9  | 16                    | 5                             | 8                      | n.                | Hudnall A. Boden.        |                  |                    |
| Tazewell.....       | Clayborne.....  | 15               |                         |                                     |                            |          |       | 64      | 27    | -4                        | 4      | 38                         | 3.80                  | -0.61                       | 1.60                                     | 2.5                   | 11                            | 9                      | 2                 | 18                       | sw.              | J. Caloway Carr.   |
| Tullahoma.....      | Coffee.....     | 1,075            | 24                      | 36.6                                | -2.1                       | 66       | 19    | 1       | 4     | 40                        | 3.95   | -0.68                      | 1.03                  | 2.7                         | 9  | 4                     | 17                            | 8                      | nw.               | O. G. Ray.               |                  |                    |
| Walling.....        | White.....      | 909              | 9                       |                                     |                            |          |       | 39      | 26    | -9                        | 5      | 42                         | 3.93                  |                             | 1.50                                     | 2.5                   | 8                             | 6                      | 17                | n.                       | John K. Roberts. |                    |
| Waynesboro.....     | Wayne.....      | 753              | 26                      | 36.6                                | -4.1                       | 65       | 20    | -2      | 4     | 38                        | 4.54   | +0.04                      | 1.55                  | 0.5                         | 6  | 11                    | 12                            | 6                      | n.                | Harry C. Boyd.           |                  |                    |
| Wildersville.....   | Henderson.....  | 400              | 15                      | 34.4                                | -3.8                       | 64       | 26    | -1      | 4     | 41                        |        |                            | 4.30                  |                             | 2.22                                     | 2.6                   | 7                             | 12                     | 5                 | 12                       | w.               | William R. Wilson. |
| Worsham.....        | Sumner.....     | 550              | 11                      |                                     |                            |          |       | 62      | 26    | 0                         | 7      | 37                         | 2.79                  |                             | 1.20                                     | 4.4                   | 6                             | 14                     | 6                 | 9                        | n.               | James G. Elizer.   |
| Yukon.....          | Lincoln.....    | 550              | 15                      | 36.2                                | -3.9                       | 64       | 19    | 1       | 4     | 37                        | 5.70   | +0.85                      | 2.60                  | 3.0                         | 7  | 7                     | 13                            | 9                      | w.                | William P. Watson.       |                  |                    |
| <b>Alabama.</b>     |                 |                  |                         |                                     |                            |          |       |         |       |                           |        |                            |                       |                             |  |                       |                               |                        |                   |                          |                  |                    |
| Bridgeport.....     | Jackson.....    | 660              | 12                      |                                     |                            |          |       | 5       | 47    | 42                        | 4.41   | -1.04                      | 1.59                  | 5.5                         | 10                                       |                       |                               |                        | ne.               | R. L. Moore.             |                  |                    |
| Decatur.....        | Morgan.....     | 573              | 30                      | 37.1                                | -5.0                       | 67       | 25    | 5       | 47    | 42                        | 3.59   | -1.57                      | 1.35                  | 2.2                         | 8  | 16                    | 4                             | 9                      | w.                | Ernest A. Carriger.      |                  |                    |
| Florence.....       | Lauderdale..... | 563              | 23                      | 37.0                                | -5.8                       | 71       | 19    | 3       | 11    | 52                        | 3.96   | -1.15                      | 1.65                  | 2.5                         | 5  | 16                    | 0                             | 13                     | w.                | Robert E. Coburn.        |                  |                    |
| Guntersville.....   | Marshall.....   | 580              | 2                       | 41.3                                |                            | 68       | 19    | 7       | 4     | 37                        | 4.80   |                            | 1.24                  | 3.8                         | 11                                       | 15                    | 6                             | 8                      | s.                | L. S. Long.              |                  |                    |
| Madison.....        | Madison.....    | 573              | 18                      | 38.8                                | -3.1                       | 71       | 19    | 4       | 4     | 38                        | 3.48   | -1.57                      | 1.00                  | 4.0                         |  |                       |                               |                        |                   |                          |                  |                    |

TABLE 1.—*Climatological data for February, 1912. District No. 3—Continued.*

| Stations.          | Counties.       | Elevation, feet. | Length of record, years. | Temperature, in degrees Fahrenheit. |                            |          |       |         |       | Precipitation, in inches. |        |                            |                       |                           |  | Sky.                  | Prevailing wind direction.    | Observers.             |     |                             |
|--------------------|-----------------|------------------|--------------------------|-------------------------------------|----------------------------|----------|-------|---------|-------|---------------------------|--------|----------------------------|-----------------------|---------------------------|--|-----------------------|-------------------------------|------------------------|-----|-----------------------------|
|                    |                 |                  |                          | Mean.                               | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range.     | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall, unmelted. | Number of rainy days, 0.01 inch or more. | Number of clear days. | Number of partly cloudy days. | Number of cloudy days. |     |                             |
| <i>Virginia.</i>   |                 |                  |                          |                                     |                            |          |       |         |       |                           |        |                            |                       |                           |  |                       |                               |                        |     |                             |
| Big Stone Gap..... | Wise.....       | 1,540            | 21                       | 34.0                                | - 1.4                      | 63       | 21†   | 0       | 5     | 35                        | 3.45   | - .52                      | 1.00                  | 3.0                       | 9  | 9                     | 3                             | 17                     | w.  | John W. Fox, sr.            |
| Blacksburg.....    | Montgomery..... | 2,170            | 21                       | 29.5                                | - 2.4                      | 57       | 19    | 0       | 7     | 36                        | 2.65   | - .55                      | 0.75                  | 3.8                       | 6  | 6                     | 10                            | 13                     | w.  | Agr. Experiment Station.    |
| Burkes Garden..... | Tazewell.....   | 3,250            | 17                       | 26.4                                | - 3.2                      | 55       | 26    | - 12    | 7     | 39                        | 3.09   | - .61                      | 1.03                  | 7.0                       | 8  | 8                     | 5                             | 16                     | w.  | C. H. Greerer.              |
| Elk Knob.....      | Lee.....        | 3,243            | 9                        | 33.0                                | -                          | 63       | 26    | - 2     | 4     | 26                        | 3.48   | -                          | 1.02                  | 4.5                       | 12                                       | 10                    | 3                             | 16                     | sw. | Henry Nicoll.               |
| Ivanhoe **.....    | Wythe.....      | 2,028            | 5                        | 29.0                                | -                          | 50       | 19    | 6       | 4     | 28                        | 2.37   | -                          | 0.64                  | 6.3                       | 10                                       | 14                    | 6                             | 9                      | w.  | Miss Alice G. Jewett.       |
| Lebanon.....       | Russell.....    | 2,131            | 2                        | 31.6                                | -                          | 67       | 26    | - 1     | 31    | 37                        | 3.00   | -                          | 0.86                  | 6.0                       | 10                                       | 14                    | 5                             | 10                     | sw. | R. D. Swain.                |
| Marion.....        | Smyth.....      | 2,224            | 17                       | -                                   | -                          | -        | -     | -       | -     | -                         | -      | -                          | -                     | -                         | -  | -                     | -                             | -                      | -   | Southwestern State Hospital |
| Max Meadows.....   | Wythe.....      | 2,028            | 16                       | 31.0                                | - 0.8                      | 58       | 18    | - 2     | 7     | 36                        | 2.65   | - .23                      | 0.72                  | 6.0                       | 6  | 8                     | 8                             | 13                     | w.  | James M. Graham.            |
| Mendota.....       | Washington..... | 1,350            | 3                        | -                                   | -                          | -        | -     | -       | -     | -                         | -      | -                          | -                     | 1.00                      | 8.3                                      | 13                    | -                             | -                      | -   | Frank M. Barker.            |
| Mountain Lake..... | Giles.....      | 4,348            | 2                        | 26.6                                | -                          | 50       | 18    | - 10    | 4     | 22                        | 2.60   | -                          | 1.20                  | -                         | 5  | 11                    | 7                             | 11                     | n.  | H. E. Dorland.              |
| Radford.....       | Montgomery..... | 1,773            | 3                        | -                                   | -                          | -        | -     | -       | -     | -                         | -      | -                          | 1.42                  | 3.0                       | 7  | -                     | -                             | -                      | -   | Arthur Roberts.             |
| Speers Ferry.....  | Scott.....      | 1,221            | 16                       | -                                   | -                          | -        | -     | -       | -     | -                         | 2.15   | - 2.58                     | 0.65                  | 3.1                       | 8  | -                     | -                             | -                      | -   | Mrs. L. E. Venable.         |
| Wytheville.....    | Wythe.....      | 2,293            | 19                       | 30.0                                | - 5.1                      | 57       | 26    | 1       | 7     | 34                        | 2.71   | - 1.52                     | 0.66                  | 8.6                       | 12                                       | 12                    | 7                             | 10                     | w.  | U. S. Weather Bureau.       |

\*, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

\*\* Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for February, 1912. District No. 3, Ohio Valley.*

TABLE 2.—*Daily precipitation for February, 1912. District No. 3—Continued.*

| Stations.         | Watershed.      | Day of month. |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |     |     |      |      |      |     |     |      |      |      |      |      |      |
|-------------------|-----------------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-----|-----|------|------|------|-----|-----|------|------|------|------|------|------|
|                   |                 | 1             | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12 | 13 | 14 | 15 | 16 | 17  | 18  | 19   | 20   | 21   | 22  | 23  | 24   | 25   | 26   | 27   | 28   | 29   |
| <i>Ohio.</i>      |                 |               |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |     |     |      |      |      |     |     |      |      |      |      |      |      |
| Amesville.        | Ohio.           | .02           | T.  | .15 | .09 | T.  | .   | T.  | .   | .08 | .   | .   | .  | .  | .  | .  | .  | .   | .   | .10  | .    | .07  | .02 | .   | .    | .52  | .04  | .    | 2.07 |      |
| Bangorville.      | Muskingum.      | .40           | .40 | T.  | .19 | T.  | .   | T.  | .05 | .   | .20 | .   | .  | .  | .  | .  | .  | .   | .25 | .    | .37  | .10  | .   | .   | .38  | T.   | T.   | 2.15 |      |      |
| Bellevontaine.    | Great Miami.    | .32           | .03 | .19 | .   | T.  | .   | T.  | .10 | .   | T.  | .28 | .  | .  | .  | .  | .  | .   | .11 | .52  | .33  | .09  | .   | .   | .34  | .    | .    | 2.31 |      |      |
| Bladensburg.      | Muskingum.      | .20           | T.  | .05 | .   | .   | .   | T.  | .02 | .   | .12 | .   | .  | .  | .  | .  | .  | .   | .09 | .06  | .35  | T.   | .   | .   | .25  | T.   | T.   | 1.14 |      |      |
| Cadiz.            | Ohio.           | .10           | .08 | .10 | .   | T.  | T.  | .   | .01 | .06 | .   | .18 | .  | .  | .  | .  | .  | .   | T.  | .20  | .    | .100 | .10 | .   | .    | .24  | T.   | T.   | 1.84 |      |
| Cambridge.        | Muskingum.      | .10           | .10 | .   | .   | .10 | .   | T.  | .   | T.  | .   | .10 | .  | .  | .  | .  | .  | .   | T.  | .24  | .    | .08  | .05 | .03 | .    | .    | .48  | T.   | T.   | 2.04 |
| Camp Dennison.    | Ohio.           | .02           | T.  | .28 | .05 | T.  | .   | T.  | .   | .   | .   | .20 | .  | .  | .  | .  | .  | .   | T.  | .29  | .    | .130 | T.  | .   | .    | .21  | T.   | T.   | 2.42 |      |
| Canal Dover.      | Muskingum.      | .20           | .20 | T.  | .   | T.  | .   | T.  | .   | .   | T.  | .09 | .  | .  | .  | .  | .  | .   | T.  | .10  | .    | .49  | .10 | .   | .    | .15  | .01  | .01  | 1.60 |      |
| Canton.           | do.             | .15           | .10 | .05 | .01 | .   | .   | T.  | .02 | .01 | .   | T.  | .  | .  | .  | .  | .  | .   | T.  | .23  | T.   | .82  | .05 | .   | .    | .15  | .01  | .01  | 1.73 |      |
| Cardington.       | Scioto.         | .             | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .  | .  | .  | .  | .  | .   | .   | .    | .20  | .    | .72 | .23 | .    | .    | .    | .32  | .    | 1.97 |
| Chillicothe       | Ohio.           | .             | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .  | .  | .  | .  | .  | .   | .   | .    | .25  | .57  | .39 | .   | .    | .    | .23  | .    | 2.11 |      |
| Cincinnati.       | Ohio.           | .02           | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .  | .  | .  | .  | .  | .   | T.  | .27  | .    | .15  | .   | .   | .    | .50  | .    | 2.17 |      |      |
| Circleville.      | Scioto.         | .07           | .03 | .11 | .   | .   | .   | .   | .04 | .   | .   | .   | .  | .  | .  | .  | .  | .   | T.  | .05  | .06  | .76  | .30 | .   | .    | .40  | .10  | T.   | 2.13 |      |
| Clarington.       | Ohio.           | .05           | .05 | .   | .   | .06 | .   | T.  | T.  | .01 | .   | .   | .  | .  | .  | .  | .  | .   | T.  | .04  | .10  | .61  | .04 | T.  | T.   | .02  | .21  | T.   | T.   | 1.53 |
| Columbus.         | Scioto.         | .09           | .01 | .11 | .   | .01 | .   | .   | .04 | .   | .   | .01 | .  | .  | .  | .  | .  | .   | T.  | .24  | .10  | .61  | .04 | T.  | T.   | .02  | .25  | T.   | T.   | 1.46 |
| Coshocton         | Muskingum.      | .10           | .02 | .   | .   | .   | .   | .   | .   | .   | .   | .12 | .  | .  | .  | .  | .  | .   | T.  | .01  | .58  | .35  | .02 | .   | .    | .    | .25  | .    | 1.46 |      |
| Dayton (1).       | Great Miami.    | .05           | .03 | .19 | T.  | .01 | .   | T.  | .   | .   | T.  | .T. | .  | .  | .  | .  | .  | .   | T.  | .17  | .10  | .98  | .01 | T.  | T.   | .16  | .44  | T.   | T.   | 2.14 |
| Dayton (2).       | do.             | .04           | .12 | T.  | .04 | .   | T.  | .   | .   | T.  | .02 | .   | .  | .  | .  | .  | .  | T.  | .18 | .10  | .60  | .    | .   | .   | .01  | .14  | .42  | T.   | T.   | 2.67 |
| Delaware          | Scioto.         | .10           | .03 | .01 | .01 | T.  | .   | T.  | .03 | .   | .   | .15 | .  | .  | .  | .  | .  | .   | T.  | .10  | .    | .80  | .   | .   | .    | .25  | .    | 1.48 |      |      |
| Demos.            | Ohio.           | .06           | .14 | .04 | .02 | T.  | .   | T.  | .01 | .   | .   | .10 | .  | .  | .  | .  | .  | .   | T.  | .12  | .10  | .90  | .09 | .   | .    | .41  | .    | 1.99 |      |      |
| Dennison.         | Muskingum.      | .03           | .08 | .02 | .   | .   | .   | T.  | .02 | .   | .   | .22 | .  | .  | .  | .  | .  | .   | T.  | .12  | .10  | .90  | .   | .   | .    | .60  | .    | 2.10 |      |      |
| Frankfort.        | Scioto.         | .             | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .  | .  | .  | .  | .  | .   | .   | .05  | .10  | .90  | .   | .   | .    | .60  | .    | 2.45 |      |      |
| Gallipolis        | Ohio.           | .10           | .20 | T.  | .   | .   | .   | T.  | .   | .   | .   | .   | .  | .  | .  | .  | .  | .   | .   | .12  | .16  | .15  | .28 | .   | .    | .31  | .02  | .04  | 1.51 |      |
| Garretttsville.   | Mahoning.       | .02           | .10 | T.  | .08 | .   | T.  | .03 | .04 | T.  | T.  | .13 | .  | .  | .  | .  | .  | .   | T.  | .20  | T.   | .60  | .10 | .   | .    | .36  | .03  | .02  | 2.19 |      |
| Granville.        | Muskingum.      | .15           | .20 | .20 | .05 | .10 | .   | T.  | .05 | .   | .15 | .   | .  | .  | .  | .  | .  | T.  | .28 | .    | .16  | T.   | .   | .   | .30  | .05  | .02  | 2.53 |      |      |
| Gratiot.          | do.             | .20           | .04 | .15 | .20 | .02 | T.  | .05 | .   | .   | .06 | .   | .  | .  | .  | .  | .  | T.  | .25 | .20  | .10  | .    | .   | .   | .19  | T.   | T.   | 2.71 |      |      |
| Green.            | Ohio.           | T.            | T.  | .30 | .   | .   | T.  | T.  | .02 | .   | .   | T.  | .  | .  | .  | .  | .  | T.  | .26 | .    | .58  | .    | .   | .   | .62  | .    | 1.77 |      |      |      |
| Green Hill.       | Muskingum.      | .04           | .04 | T.  | .03 | .   | T.  | T.  | .02 | .   | .   | .06 | .  | .  | .  | .  | .  | T.  | .20 | .10  | .20  | .16  | .   | .   | .66  | .    | 2.42 |      |      |      |
| Hamilton          | Great Miami.    | T.            | .19 | .   | .   | .12 | .   | T.  | .   | .   | T.  | .   | .  | .  | .  | .  | .  | T.  | .24 | .08  | .130 | .    | .   | .   | .41  | .    | 2.33 |      |      |      |
| Haydenville.      | Ohio.           | .04           | .04 | .14 | .04 | .   | .   | T.  | .   | .   | T.  | .02 | .  | .  | .  | .  | .  | T.  | .13 | .07  | .13  | .16  | .   | .   | .21  | .07  | .09  | 3.11 |      |      |
| Hillsboro.        | Scioto.         | .11           | .18 | .31 | .55 | .10 | .   | .   | .   | .   | T.  | .   | .  | .  | .  | .  | .  | T.  | .46 | .10  | .06  | T.   | .   | .   | .86  | .    | 2.89 |      |      |      |
| Ironton.          | Ohio.           | .02           | .   | .40 | .   | .10 | .   | .   | .   | .   | T.  | .   | .  | .  | .  | .  | .  | T.  | .20 | .    | .75  | .    | .   | .   | .85  | .    | 1.93 |      |      |      |
| Jacksonburg.      | Great Miami.    | .             | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .  | .  | .  | .  | .  | T.  | .15 | .17  | .60  | .57  | .   | .   | .60  | .    | 2.59 |      |      |      |
| Kenton.           | Scioto.         | .20           | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .  | .  | .  | .  | .  | T.  | .27 | T.   | .12  | .80  | .04 | T.  | T.   | .01  | .04  | T.   | T.   | 2.12 |
| Killbuck.         | Muskingum.      | .16           | .04 | .05 | .02 | T.  | T.  | .01 | .02 | .   | T.  | .21 | .  | .  | .  | .  | .  | T.  | .37 | .05  | .130 | T.   | .   | .   | .27  | T.   | T.   | 2.51 |      |      |
| Lancaster.        | Ohio.           | .04           | .25 | .15 | T.  | T.  | .   | T.  | .   | .   | .08 | .   | .  | .  | .  | .  | .  | T.  | .09 | .    | .16  | .34  | .   | .   | .58  | .02  | .    | 2.31 |      |      |
| McConnellsville.  | Muskingum.      | .14           | .05 | .19 | .   | .01 | .   | T.  | .03 | .   | T.  | .24 | .  | .  | .  | .  | .  | T.  | .07 | .01  | .85  | .    | .   | .   | .35  | .    | 1.69 |      |      |      |
| Marietta.         | Ohio.           | .07           | .01 | .09 | .03 | .03 | .   | T.  | .   | .   | .06 | .   | .  | .  | .  | .  | .  | T.  | .35 | .10  | .30  | .08  | .   | .   | .60  | T.   | T.   | 3.01 |      |      |
| Marion.           | Scioto.         | .10           | .10 | .06 | .05 | .   | .   | T.  | .05 | .02 | .   | .30 | .  | .  | .  | .  | .  | T.  | .20 | .    | .12  | .80  | .04 | .   | .    | .40  | .    | 1.84 |      |      |
| Millardton.       | Muskingum.      | .30           | .08 | .06 | T.  | .   | T.  | T.  | .   | T.  | .28 | .   | .  | .  | .  | .  | .  | T.  | .40 | .    | .11  | .00  | .   | .   | .38  | T.   | T.   | 2.03 |      |      |
| Millport.         | do.             | .03           | .06 | .06 | T.  | T.  | .   | T.  | .   | T.  | .08 | .   | .  | .  | .  | .  | .  | T.  | .12 | .05  | .60  | .10  | .   | .   | .35  | .    | 1.50 |      |      |      |
| Nellie.           | Muskingum.      | .20           | .02 | .03 | .03 | .03 | .   | T.  | .04 | .04 | .   | .14 | .  | .  | .  | .  | .  | T.  | .13 | .09  | .50  | T.   | .   | .   | .25  | .    | 1.50 |      |      |      |
| New Alexandria.   | Ohio.           | T.            | .20 | T.  | .30 | .   | T.  | T.  | .01 | .   | .40 | .   | .  | .  | .  | .  | .  | T.  | .25 | .06  | .50  | .04  | T.  | T.  | .20  | .    | 2.00 |      |      |      |
| New Berlin.       | Muskingum.      | .03           | .01 | T.  | .   | .   | T.  | T.  | .01 | .   | .05 | .   | .  | .  | .  | .  | .  | T.  | .23 | .    | .20  | .85  | .   | .   | .40  | .    | 2.03 |      |      |      |
| New Waterford.    | Ohio.           | .10           | .10 | .13 | .   | .   | .   | T.  | .   | .   | .20 | .   | .  | .  | .  | .  | .  | T.  | .24 | .    | .95  | T.   | .   | .   | .34  | T.   | T.   | 1.68 |      |      |
| O. S. University. | Scioto.         | .03           | T.  | .08 | .   | .01 | .   | T.  | .   | .   | .03 | .   | .  | .  | .  | .  | .  | T.  | .17 | .    | .125 | .04  | .   | .   | .39  | T.   | T.   | 2.03 |      |      |
| Pataskala.        | Muskingum.      | .14           | .08 | .07 | .   | .02 | .   | T.  | .   | .   | .09 | .   | .  | .  | .  | .  | .  | T.  | .20 | .    | .15  | .29  | .03 | .   | .    | .22  | T.   | T.   | 3.06 |      |
| Peebles.          | Ohio.           | .07           | .   | .12 | .   | .10 | .   | T.  | .   | .   | .30 | .   | .  | .  | .  | .  | .  | T.  | .24 | .20  | .76  | T.   | .   | .   | .22  | T.   | T.   | 1.70 |      |      |
| Philo (1).        | Muskingum.      | .06           | .08 | .07 | .   | .   | T.  | .   | .   | .   | .07 | .   | .  | .  | .  | .  | .  | T.  | .15 | .68  | .53  | .    | .   | .   | .40  | .    | 2.49 |      |      |      |
| Piqua             | Great Miami.    | .33           | .   | .24 | .09 | .   | .   | T.  | .   | .   | .07 | .   | .  | .  | .  | .  | .  | T.  | .51 | T.   | .70  | T.   | .   | .   | .30  | .    | 2.01 |      |      |      |
| Plattsburg.       | do.             | .10           | T.  | .30 | .   | .   | .   | T.  | .   | .   | .10 | .   | .  | .  | .  | .  | .  | T.  | .26 | .97  | .23  | .    | .   | .   | 1.01 | T.   | 2.89 |      |      |      |
| Prospect          | Scioto.         | .             | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .  | .  | .  | .  | .  | T.  | .15 | .    | .34  | .20  | .   | .   | .04  | T.   | T.   | 0.98 |      |      |
| Rittman.          | Muskingum.      | .10           | .05 | .   | .   | .   | T.  | .05 | .   | T.  | .10 | .   | .  | .  | .  | .  | .  | T.  | .21 | .    | .67  | .08  | .   | .   | .34  | T.   | T.   | 1.80 |      |      |
| Shenandoah.       | do.             | .05           | .16 | .05 | .   | .   | T.  | .02 | .   | T.  | .02 | .   | .  | .  | .  | .  | .  | T.  | .19 | .    | .10  | .05  | .   | .   | .60  | T.   | T.   | 2.26 |      |      |
| Sidney.           | Great Miami.    | .07           | .02 | .13 | T.  | .   | T.  | .02 | .   | T.  | .15 | .   | .  | .  | .  | .  | .  | T.  | .29 | T.   | .22  | .02  | .   | .   | .    | .17  | T.   | T.   | 1.66 |      |
| Somerset          | Muskingum.      | .10           | .25 | .25 | .04 | .04 | T.  | T.  | .   | T.  | .30 | .   | .  | .  | .  | .  | .  | T.  | .17 | .    | .125 | .04  | .   | .   | .39  | T.   | T.   | 2.26 |      |      |
| Springfield.      | Great Miami.    | .06           | .17 | .17 | .12 | .02 | .   | T.  | .01 | T.  | .03 | .   | .  | .  | .  | .  | .  | T.  | .13 | .04  | .72  | .03  | .   | .   | .22  | .02  | .    | 1.59 |      |      |
| Summerfield.      | Ohio.           | .02           | .12 | .10 | .03 | T.  | T.  | .04 | .   | T.  | .12 | .   | .  | .  | .  | .  | .  | T.  | .25 | .    | .125 | T.   | .   | .   | .75  | T.   | T.   | 2.90 |      |      |
| Thurman.          | do.             | .10           | .30 | .30 | .05 | .05 | .   | T.  | .   | T.  | .10 | .   | .  | .  | .  | .  | T. | .40 | .   | .75  | T.   | .    | .   | .80 | T.   | T.   | 2.35 |      |      |      |
| Urbana.           | Great Miami.    | .15           | .13 | .20 | .   | .   | .02 | T.  | .02 | .   | T.  | .12 | .  | .  | .  | .  | .  | T.  | .42 | .    | .108 | .15  | .   | .   | .37  | T.   | T.   | 2.66 |      |      |
| Warren.           | Mahoning.       | .06           | .05 | .04 | .02 | T.  | .05 | .03 | .   | T.  | .16 | .   | .  | .  | .  | .  | T. | .28 | T.  | .43  | .18  | .    | .   | .33 | T.   | T.   | 1.73 |      |      |      |
| Waverly.          | Scioto.         | .02           | .02 | .50 | .10 | .05 | T.  | .   | .   | T.  | .   | .   | .  | .  | .  | .  | T. | .05 | .10 | T.   | .    | .    | .66 | .03 | .    | 2.63 |      |      |      |      |
| Waynesville.      | Great Miami.    | .05           | .12 | .   | .   | .   | .   | .   | .   | .   | .   | .   | .  | .  | .  | .  | .  | T.  | .35 | .    | .10  | .    | .   | .   | .42  | T.   | T.   | 2.04 |      |      |
| Youngstown        | Mahoning.       | .10           | .10 | .02 | .   | .   | .   | T.  | .   | .   | .20 | .   | .  | .  | .  | .  | T. | .24 | .05 | .72  | .    | .    | .   | .90 | T.   | T.   | 1.58 |      |      |      |
| Zanesville        | Muskingum.      | T.            | .07 | .   | .07 | .   | .   | .   | .   | .08 | .   | .   | .  | .  | .  | .  | T. | .40 | .   | .78  | .05  | T.   | .   | .   | .80  | .20  | .10  | 2.45 |      |      |
| <i>Indiana.</i>   |                 |               |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |     |     |      |      |      |     |     |      |      |      |      |      |      |
| Anderson.         | W. Fork, White. | .04           | .02 | .11 | T.  | .   | T.  | .   | .05 | .   | T.  | .   | .  | .  | .  | .  | .  | T.  | .14 | .    | .150 | T.   | .   | .   | .78  | .    | .    | 2.59 |      |      |
| Attica            | Wabash.         | .10           | .25 | .05 | .20 | .08 | T.  | .05 | .   | T.  | .   | .   | .  | .  | .  | .  | T. | .01 | .04 | .110 | .60  | .    | .   | .55 | .06  | .    | 3.17 |      |      |      |
| Bloomington       | W.              |               |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |     |     |      |      |      |     |     |      |      |      |      |      |      |

TABLE 2.—*Daily precipitation for February, 1912. District No. 3—Continued.*

TABLE 2.—*Daily precipitation for February, 1912. District No. 3—Continued.*

\* Precipitation included in that of the next measurement.  
\* Separate dates of falls not recorded.

Precipitation for the 24 hours ended

T. Precipitation is less than 0.01 inch rain or melted snow.

1.1 The proportion of new urban areas from total urban area is 0.01.

TABLE 3.—Maximum and minimum temperatures at selected stations for February, 1912. District No. 3, Ohio Valley.

| Date.  | Pennsylvania. |      |             |      | West Virginia. |      |          |      |         |      |            |      |             |      | Ohio.         |      |                |      |           |      | Canton. |      | Cincinnati. |      | Columbus. |      | Dayton. |      |
|--------|---------------|------|-------------|------|----------------|------|----------|------|---------|------|------------|------|-------------|------|---------------|------|----------------|------|-----------|------|---------|------|-------------|------|-----------|------|---------|------|
|        | Greenville.   |      | Pittsburgh. |      | Charleston.    |      | Elkhorn. |      | Elkins. |      | Glenville. |      | Huntington. |      | Morgan- town. |      | Parkers- burg. |      | Wheeling. |      | Canton. |      | Cincinnati. |      | Columbus. |      | Dayton. |      |
|        | Max.          | Min. | Max.        | Min. | Max.           | Min. | Max.     | Min. | Max.    | Min. | Max.       | Min. | Max.        | Min. | Max.          | Min. | Max.           | Min. | Max.      | Min. | Max.    | Min. | Max.        | Min. | Max.      | Min. |         |      |
| 1....  | 33            | 5    | 31          | 21   | 37             | 20   | 35       | 14   | 31      | 19   | 34         | 16   | 35          | 23   | 30            | 21   | 33             | 21   | 29        | 19   | 35      | 23   | 33          | 21   | 34        | 22   |         |      |
| 2....  | 28            | 6    | 26          | 13   | 37             | 22   | 29       | 18   | 27      | 12   | 33         | 18   | 25          | 23   | 29            | 17   | 26             | 12   | 29        | 22   | 27      | 13   | 23          | 12   | 24        | 8    |         |      |
| 3....  | 15            | -2   | 19          | 7    | 28             | 12   | 28       | 7    | 26      | 5    | 29         | -1   | 35          | 14   | 20            | 7    | 22             | 8    | 18        | 2    | 18      | 6    | 14          | 3    | 13        | 3    |         |      |
| 4....  | 14            | -1   | 10          | 1    | 27             | 5    | 26       | 0    | 23      | 0    | 23         | 4    | 12          | 1    | 22            | 2    | 12             | 0    | 15        | 1    | 11      | 1    | 7           | 4    | 5         | 3    |         |      |
| 5....  | 12            | -1   | 12          | 0    | 20             | 5    | 20       | 3    | 14      | 1    | 20         | -4   | 21          | 1    | 14            | 1    | 17             | 5    | 18        | 1    | 12      | 1    | 16          | 7    | 15        | 3    |         |      |
| 6....  | 22            | -4   | 21          | 5    | 23             | 2    | 23       | 6    | 17      | 5    | 24         | -1   | 22          | 1    | 17            | 6    | 23             | 7    | 23        | 5    | 22      | 8    | 22          | 1    | 20        | 7    |         |      |
| 7....  | 20            | 11   | 21          | 13   | 27             | 3    | 33       | 5    | 28      | -1   | 27         | -4   | 27          | 2    | 22            | 11   | 21             | 2    | 22        | 9    | 19      | 9    | 28          | 10   | 23        | 7    |         |      |
| 8....  | 20            | 10   | 19          | 10   | 40             | 20   | 34       | 23   | 24      | 5    | 30         | 20   | 30          | 5    | 23            | 17   | 24             | 5    | 25        | 10   | 20      | 8    | 27          | 10   | 23        | 5    |         |      |
| 9....  | 15            | -2   | 15          | 4    | 30             | 8    | 32       | 21   | 22      | -5   | 25         | -7   | 27          | 6    | 21            | 6    | 21             | -3   | 23        | -1   | 16      | 0    | 19          | 5    | 14        | -1   |         |      |
| 10.... | 18            | -9   | 10          | -9   | 28             | 3    | 32       | 5    | 23      | 0    | 21         | -6   | 19          | 4    | 18            | -5   | 15             | -1   | 20        | -3   | 8       | -9   | 18          | -1   | 11        | -7   |         |      |
| 11.... | 20            | -12  | 24          | 2    | 37             | 4    | 36       | 11   | 32      | -5   | 36         | 1    | 31          | -4   | 31            | -2   | 31             | -3   | 21        | -7   | 36      | 5    | 28          | -1   | 29        | 1    |         |      |
| 12.... | 23            | 7    | 27          | 13   | 39             | 27   | 41       | 22   | 30      | 24   | 37         | 25   | 38          | 1    | 31            | 23   | 34             | 17   | 31        | -3   | 23      | 5    | 36          | 12   | 27        | 5    |         |      |
| 13.... | 37            | -14  | 31          | 6    | 38             | 23   | 40       | 23   | 37      | 16   | 38         | 12   | 35          | 18   | 36            | 10   | 34             | 6    | 43        | -1   | 33      | 7    | 32          | 6    | 31        | -1   |         |      |
| 14.... | 36            | 3    | 41          | 19   | 44             | 26   | 48       | 25   | 43      | 15   | 45         | 15   | 40          | 18   | 44            | 21   | 43             | 19   | 43        | -1   | 38      | 14   | 43          | 23   | 40        | 19   |         |      |
| 15.... | 36            | 16   | 38          | 22   | 44             | 28   | 46       | 30   | 41      | 18   | 42         | 19   | 43          | 26   | 40            | 20   | 42             | 27   | 44        | 21   | 38      | 17   | 46          | 26   | 42        | 23   |         |      |
| 16.... | 41            | 9    | 42          | 21   | 47             | 25   | 44       | 24   | 43      | 15   | 47         | 14   | 47          | 24   | 40            | 19   | 45             | 22   | 49        | 20   | 44      | 18   | 47          | 27   | 44        | 30   |         |      |
| 17.... | 42            | 26   | 48          | 25   | 54             | 28   | 52       | 28   | 52      | 20   | 53         | 20   | 51          | 24   | 52            | 28   | 46             | 21   | 45        | 29   | 55      | 20   | 47          | 24   | 53        | 28   |         |      |
| 18.... | 46            | 19   | 48          | 28   | 54             | 33   | 55       | 30   | 49      | 22   | 53         | 23   | 49          | 26   | 52            | 33   | 48             | 30   | 49        | 26   | 56      | 36   | 49          | 37   | 52        | 36   |         |      |
| 19.... | 41            | 30   | 49          | 37   | 58             | 32   | 58       | 32   | 53      | 32   | 54         | 26   | 54          | 31   | 52            | 37   | 48             | 33   | 50        | 26   | 42      | 33   | 46          | 37   | 44        | 35   |         |      |
| 20.... | 39            | 25   | 40          | 31   | 58             | 36   | 60       | 35   | 45      | 37   | 45         | 36   | 41          | 32   | 43            | 32   | 45             | 31   | 37        | 28   | 42      | 31   | 37          | 28   | 42        | 29   |         |      |
| 21.... | 41            | 23   | 49          | 25   | 65             | 38   | 61       | 37   | 54      | 24   | 46         | 37   | 64          | 35   | 49            | 32   | 62             | 23   | 61        | 31   | 44      | 25   | 40          | 19   | 45        | 16   |         |      |
| 22.... | 40            | 10   | 25          | 13   | 52             | 20   | 40       | 7    | 25      | 15   | 41         | 28   | 30          | 22   | 39            | 16   | 27             | 20   | 25        | 16   | 25      | 11   | 27          | 19   | 23        | 14   |         |      |
| 23.... | 38            | 11   | 38          | 17   | 47             | 21   | 40       | 14   | 42      | 15   | 45         | 21   | 44          | 21   | 39            | 16   | 43             | 20   | 44        | 18   | 39      | 14   | 47          | 20   | 40        | 18   |         |      |
| 24.... | 47            | 29   | 48          | 32   | 49             | 26   | 44       | 19   | 50      | 19   | 47         | 21   | 46          | 22   | 45            | 30   | 45             | 27   | 45        | 23   | 45      | 29   | 46          | 33   | 44        | 34   |         |      |
| 25.... | 47            | 26   | 51          | 36   | 53             | 39   | 55       | 35   | 46      | 36   | 51         | 31   | 52          | 28   | 53            | 30   | 53             | 37   | 68        | 29   | 50      | 28   | 47          | 37   | 44        | 33   |         |      |
| 26.... | 45            | 32   | 57          | 49   | 70             | 45   | 64       | 45   | 60      | 38   | 66         | 39   | 63          | 40   | 59            | 38   | 63             | 37   | 64        | 31   | 61      | 32   | 58          | 27   | 53        | 24   |         |      |
| 27.... | 43            | 19   | 40          | 22   | 58             | 27   | 64       | 22   | 38      | 23   | 57         | 22   | 36          | 28   | 53            | 24   | 37             | 27   | 34        | 26   | 38      | 20   | 34          | 24   | 30        | 21   |         |      |
| 28.... | 33            | 19   | 31          | 21   | 44             | 24   | 42       | 20   | 36      | 22   | 41         | 20   | 45          | 25   | 37            | 23   | 40             | 26   | 36        | 21   | 33      | 18   | 42          | 26   | 37        | 21   |         |      |
| 29.... | 28            | 15   | 29          | 19   | 44             | 26   | 42       | 25   | 31      | 24   | 39         | 23   | 32          | 25   | 33            | 21   | 33             | 22   | 37        | 19   | 23      | 13   | 30          | 21   | 28        | 14   |         |      |
| Mns.   | 31.4          | 10.2 | 32.4        | 17.0 | 43.2           | 21.7 | 42.1     | 20.2 | 35.9    | 15.6 | 39.6       | 15.9 | 37.9        | 18.2 | 36.6          | 18.8 | 35.6           | 17.5 | 37.1      | 14.7 | 31.3    | 13.7 | 35.3        | 18.1 | 31.6      | 15.3 | 31.5    | 14.9 |

| Date.  | Ohio.   |      |          |      | Indiana.     |      |             |      |               |      |         |      | Philo, Ill. |      |              |      |              |      |                |      | Kentucky.   |      |             |      |            |      |
|--------|---------|------|----------|------|--------------|------|-------------|------|---------------|------|---------|------|-------------|------|--------------|------|--------------|------|----------------|------|-------------|------|-------------|------|------------|------|
|        | Marion. |      | Waverly. |      | Butlerville. |      | Evansville. |      | Indianapolis. |      | Kokomo. |      | Rockville.  |      | Worthington. |      | Beattyville. |      | Bowling Green. |      | Earlington. |      | Greensburg. |      | Lexington. |      |
|        | Max.    | Min. | Max.     | Min. | Max.         | Min. | Max.        | Min. | Max.          | Min. | Max.    | Min. | Max.        | Min. | Max.         | Min. | Max.         | Min. | Max.           | Min. | Max.        | Min. | Max.        | Min. | Max.       | Min. |
| 1....  | 33      | 14   | 34       | 16   | 30           | 24   | 36          | 24   | 31            | 19   | 30      | 21   | 33          | 24   | 32           | 19   | 35           | 16   | 36             | 30   | 34          | 23   | 35          | 21   | 33         | 22   |
| 2....  | 23      | 12   | 29       | 16   | 24           | 11   | 24          | 14   | 19            | 8    | 25      | 5    | 24          | 7    | 19           | 6    | 28           | 28   | 19             | 26   | 16          | 24   | 20          | 22   | 9          |      |
| 3....  | 17      | -4   | 27       | 1    | 16           | 4    | 27          | 1    | 14            | -3   | 10      | -5   | 15          | 6    | 10           | -3   | 34           | 3    | 36             | 14   | 36          | 15   | 35          | 10   | 31         | 6    |
| 4....  | 8       | -8   | 16       | -6   | 10           | -13  | 16          | -6   | 6             | 5    | -11     | 7    | -12         | 8    | -16          | 9    | 10           | -10  | 19             | 5    | 18          | -5   | 15          | -6   | 7          | -9   |
| 5....  | 19      | 0    | 18       | 1    | 13           | 0    | 18          | 13   | 14            | 5    | 15      | 2    | 16          | 7    | 15           | 3    | 20           | -4   | 25             | 10   | 23          | -1   | 25          | 7    | 16         | 7    |
| 6....  | 24      | 5    | 27       | -7   | 20           | -10  | 19          | 13   | 17            | 3    | 17      | -2   | 18          | 4    | 17           | 6    | 35           | -6   | 26             | 6    | 18          | 5    | 27          | 4    | 20         | 5    |
| 7....  | 24      | 8    | 23       | -5   | 26           | 7    | 35          | 16   | 25            | 13   | 24      | 12   | 28          | 15   | 26           | 10   | 31           | -4   | 39             | 11   | 41          | 12   | 34          | 3    | 27         | 6    |
| 8....  | 22      | 0    | 29       | 9    | 25           | 5    | 26          | 18   | 18            | 5    | 24      | -2   | 26          | 3    | 16           | 0    | 36           | 3    | 31             | 20   | 30          | 17   | 30          | 12   | 20         | 13   |
| 9....  | 15      | -5   | 24       | -9   | 18           | -5   | 21          | 11   | 13            | 0    | 11      | -8   | 17          | -4   | 13           | -6   | 29           | 10   | 27             | 15   | 23          | 17   | 27          | 11   | 20         | 7    |
| 10.... | 14      | -12  | 18       | -10  | 19           | -5   | 24          | 5    | 14            | -3   | 14      | -16  | 22          | -6   | 20           | -7   | 24           | 4    | 32             | 7    | 33          | 6    | 25          | 5    | 17         | 1    |
| 11.... | 25      | -4   | 34       | -9   | 30           | 0    | 39          | 15   | 30            | 7    | 26      | -2   | 33          | 5    | 31           | 17   | 46           | -3   | 47             | 5    | 45          | 7    | 47          | 2    | 37         | 4    |
| 12.... | 23      | 10   | 35       | 21   | 30           | 19   | 32          | 20   | 28            | 3    | 26      | 11   | 33          | 21   | 25           | 15   | 40           | 7    | 43             | 24   | 34          | 22   | 42          | 2    | 35         | 22   |
| 13.... | 35      | -9   | 32       | 1    | 32           | 4    | 34          | 14   | 31            | 3    | 27      | -9   | 31          | 6    | 30           | 5    | 43           | 23   | 44             | 25   | 40          | 14   | 40          | 18   | 34         | 12   |
| 14.... | 36      | 14   | 44       | 13   | 42           | 21   | 45          | 30   | 36            | 23   | 35      | 12   | 40          | 22   | 36           | 24   | 48           | 25   | 52             | 21   | 48          | 17   | 41          | 25   | 41         | 25   |
| 15.... | 46      | 15   | 45       | 22   | 50           | 25   | 50          | 30   | 46</td        |      |         |      |             |      |              |      |              |      |                |      |             |      |             |      |            |      |

TABLE 3.—Maximum and minimum temperatures at selected stations for February, 1912. District No. 3—Continued.

| Date.  | Kentucky.   |      |                    |      |                       |      | Tennessee.        |      |                     |      |                 |      |            |      |           |      | Decatur,<br>Ala. §§ |      | Asheville<br>N. C. |      | Virginia. |      |                   |      |                  |      |      |      |
|--------|-------------|------|--------------------|------|-----------------------|------|-------------------|------|---------------------|------|-----------------|------|------------|------|-----------|------|---------------------|------|--------------------|------|-----------|------|-------------------|------|------------------|------|------|------|
|        | Louisville. |      | Mays-<br>ville. §§ |      | Williams-<br>burg. §§ |      | Chatta-<br>nooga. |      | Johnson<br>City. §§ |      | Knox-<br>ville. |      | Nashville. |      | Palmetto. |      | Sparta.             |      | Waynes-<br>boro.   |      |           |      | Big Stone<br>Gap. |      | Wythe-<br>ville. |      |      |      |
|        | Max.        | Min. | Max.               | Min. | Max.                  | Min. | Max.              | Min. | Max.                | Min. | Max.            | Min. | Max.       | Min. | Max.      | Min. | Max.                | Min. | Max.               | Min. | Max.      | Min. | Max.              | Min. | Max.             | Min. |      |      |
| 1....  | 35          | 24   | 36                 | 26   | 36                    | 21   | 48                | 30   | 38                  | 20   | 42              | 26   | 40         | 30   | 44        | 28   | 41                  | 24   | 45                 | 27   | 48        | 26   | 43                | 18   | 38               | 16   | 34   | 19   |
| 2....  | 24          | 13   | 22                 | 19   | 35                    | 18   | 36                | 25   | 28                  | 26   | 32              | 24   | 32         | 20   | 35        | 22   | 49                  | 26   | 37                 | 20   | 52        | 26   | 27                | 19   | 38               | 15   | 28   | 15   |
| 3....  | 24          | 3    | 21                 | 6    | 30                    | 19   | 51                | 18   | 36                  | 9    | 38              | 4    | 40         | 5    | 41        | 20   | 31                  | 22   | 45                 | 20   | 55        | 23   | 23                | 13   | 27               | 11   | 30   | 11   |
| 4....  | 13          | -5   | 11                 | -8   | 43                    | -3   | 25                | 5    | 14                  | 4    | 20              | 5    | 20         | 0    | 25        | 3    | 36                  | -1   | 20                 | 2    | 22        | 5    | 27                | 3    | 32               | 3    | 30   | 2    |
| 5....  | 19          | 12   | 19                 | -6   | 27                    | 7    | 38                | 12   | 23                  | -3   | 31              | 13   | 33         | 15   | 37        | 13   | 31                  | -4   | 36                 | 10   | 25        | 5    | 29                | 7    | 23               | 0    | 17   | 3    |
| 6....  | 21          | 7    | 27                 | -8   | 30                    | 9    | 35                | 20   | 24                  | 10   | 31              | 17   | 28         | 15   | 20        | 15   | 35                  | 8    | 28                 | 13   | 25        | 12   | 31                | 16   | 28               | 13   | 24   | 7    |
| 7....  | 34          | 16   | 27                 | -7   | 38                    | 10   | 40                | 17   | 34                  | 4    | 37              | 17   | 42         | 17   | 42        | 14   | 37                  | 13   | 42                 | 14   | 38        | 11   | 35                | 7    | 29               | 1    |      |      |
| 8....  | 28          | 15   | 31                 | 9    | 38                    | 11   | 51                | 30   | 38                  | 5    | 42              | 26   | 39         | 25   | 42        | 25   | 40                  | 24   | 43                 | 23   | 52        | 14   | 39                | 28   | 40               | 27   | 36   | 21   |
| 9....  | 23          | 9    | 26                 | 0    | 35                    | 13   | 47                | 29   | 40                  | 19   | 44              | 26   | 31         | 22   | 34        | 22   | 38                  | 22   | 36                 | 21   | 42        | 25   | 46                | 23   | 40               | 20   | 37   | 25   |
| 10.... | 21          | 4    | 24                 | 0    | 38                    | 11   | 32                | 24   | 31                  | 20   | 29              | 24   | 36         | 16   | 25        | 18   | 30                  | 21   | 33                 | 16   | 25        | 22   | 32                | 22   | 34               | 16   | 29   | 16   |
| 11.... | 39          | 7    | 40                 | -3   | 48                    | 10   | 41                | 25   | 42                  | 17   | 41              | 21   | 42         | 11   | 44        | 2    | 43                  | 4    | 46                 | 8    | 42        | 10   | 40                | 22   | 42               | 20   | 38   | 14   |
| 12.... | 37          | 17   | 34                 | 0    | 50                    | 33   | 50                | 24   | 42                  | 19   | 47              | 28   | 42         | 27   | 49        | 24   | 45                  | 25   | 48                 | 21   | 52        | 10   | 45                | 24   | 45               | 27   | 39   | 24   |
| 13.... | 34          | 11   | 39                 | 8    | 43                    | 20   | 46                | 27   | 41                  | 22   | 46              | 27   | 45         | 22   | 45        | 20   | 49                  | 19   | 48                 | 20   | 47        | 22   | 48                | 22   | 45               | 20   | 40   | 20   |
| 14.... | 46          | 24   | 48                 | 8    | 45                    | 28   | 42                | 35   | 46                  | 21   | 45              | 35   | 56         | 34   | 50        | 35   | 53                  | 33   | 58                 | 35   | 47        | 27   | 35                | 27   | 50               | 30   | 42   | 25   |
| 15.... | 50          | 28   | 49                 | 17   | 53                    | 30   | 54                | 40   | 40                  | 34   | 46              | 38   | 51         | 31   | 55        | 28   | 54                  | 34   | 55                 | 24   | 56        | 33   | 40                | 32   | 47               | 35   | 37   | 27   |
| 16.... | 51          | 31   | 51                 | 22   | 47                    | 23   | 51                | 34   | 51                  | 32   | 52              | 30   | 51         | 34   | 57        | 27   | 55                  | 28   | 58                 | 26   | 56        | 30   | 51                | 30   | 46               | 28   | 44   | 25   |
| 17.... | 57          | 31   | 58                 | 23   | 42                    | 21   | 55                | 40   | 51                  | 31   | 49              | 34   | 50         | 30   | 60        | 28   | 60                  | 29   | 61                 | 26   | 59        | 33   | 48                | 32   | 55               | 28   | 47   | 23   |
| 18.... | 54          | 36   | 59                 | 26   | 48                    | 24   | 60                | 43   | 47                  | 32   | 57              | 42   | 60         | 42   | 62        | 46   | 66                  | 30   | 61                 | 30   | 60        | 42   | 46                | 34   | 52               | 36   | 47   | 37   |
| 19.... | 48          | 37   | 50                 | 30   | 50                    | 27   | 65                | 44   | 65                  | 29   | 64              | 34   | 61         | 43   | 67        | 44   | 66                  | 39   | 62                 | 42   | 62        | 43   | 59                | 27   | 50               | 28   | 57   | 29   |
| 20.... | 41          | 32   | 43                 | 31   | 62                    | 31   | 60                | 49   | 58                  | 31   | 55              | 47   | 59         | 42   | 56        | 48   | 60                  | 49   | 65                 | 50   | 63        | 46   | 60                | 36   | 56               | 42   | 48   | 33   |
| 21.... | 39          | 22   | 50                 | 31   | 60                    | 43   | 60                | 30   | 65                  | 42   | 64              | 29   | 60         | 27   | 62        | 31   | 61                  | 30   | 62                 | 30   | 42        | 40   | 58                | 27   | 63               | 42   | 57   | 23   |
| 22.... | 32          | 21   | 32                 | 20   | 51                    | 22   | 41                | 27   | 31                  | 23   | 35              | 24   | 38         | 24   | 41        | 23   | 45                  | 17   | 40                 | 22   | 44        | 24   | 31                | 20   | 42               | 20   | 27   | 18   |
| 23.... | 48          | 23   | 49                 | 17   | 40                    | 27   | 48                | 27   | 47                  | 18   | 48              | 23   | 50         | 25   | 52        | 25   | 53                  | 18   | 52                 | 20   | 57        | 28   | 49                | 19   | 46               | 16   | 44   | 18   |
| 24.... | 42          | 35   | 44                 | 19   | 58                    | 24   | 45                | 36   | 47                  | 24   | 44              | 32   | 43         | 36   | 51        | 36   | 50                  | 34   | 52                 | 36   | 53        | 33   | 41                | 32   | 41               | 25   | 35   | 25   |
| 25.... | 46          | 37   | 56                 | 26   | 60                    | 30   | 54                | 41   | 59                  | 33   | 50              | 40   | 63         | 43   | 54        | 45   | 53                  | 45   | 60                 | 46   | 67        | 43   | 48                | 35   | 50               | 38   | 49   | 33   |
| 26.... | 56          | 27   | 60                 | 35   | 45                    | 35   | 70                | 35   | 66                  | 44   | 67              | 39   | 57         | 30   | 62        | 39   | 63                  | 45   | 62                 | 36   | 61        | 37   | 68                | 40   | 63               | 45   | 57   | 42   |
| 27.... | 39          | 24   | 39                 | 25   | 55                    | 21   | 46                | 29   | 37                  | 29   | 41              | 28   | 44         | 28   | 46        | 29   | 45                  | 28   | 45                 | 29   | 45        | 31   | 40                | 24   | 63               | 28   | 42   | 25   |
| 28.... | 45          | 28   | 47                 | 22   | 68                    | 31   | 51                | 29   | 46                  | 25   | 50              | 27   | 50         | 28   | 55        | 25   | 51                  | 21   | 56                 | 22   | 55        | 26   | 46                | 27   | 49               | 22   | 43   | 24   |
| 29.... | 32          | 23   | 33                 | 23   | 50                    | 20   | 53                | 30   | 43                  | 25   | 45              | 28   | 38         | 28   | 43        | 32   | 44                  | 32   | 43                 | 30   | 42        | 25   | 49                | 28   | 47               | 21   | 43   | 24   |
| Mns.   | 37.1        | 20.4 | 39.1               | 14.2 | 45.7                  | 21.2 | 48.3              | 20.5 | 42.4                | 22.2 | 44.6            | 27.6 | 45.2       | 25.9 | 47.1      | 26.4 | 47.7                | 24.7 | 48.4               | 24.8 | 48.2      | 26.0 | 43.1              | 24.1 | 44.7             | 23.4 | 39.0 | 21.0 |

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§ Data are from standard instruments not supplied by the U. S. Weather Bureau.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.